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ARCHÆOLOGICAL SURVEY OF INDIA.

ANNUAL REPORT

1905-6.



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ARCHÆOLOGICAL SURVEY OF INDIA.

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CONSERVATION.

THE official year 1905-6 was ushered in by perhaps the worst disaster that has befallen the monuments of India since the days of the great iconoclast Aurangzeb. On April 4th, the earthquake, which destroyed Dharmsālā, reduced to ruins some of the most ancient and famous buildings in the hill districts of the Panjab, and did irreparable damage to many more. An account of those which suffered most in the Kāṅgṛā District and Chambā State will be found in a special article below, which Dr. Vogel has devoted to the subject, and it will be seen that among them are to be numbered the temple of Sidhnāth at Baijnāth and the well-known Fort and Temples of Kāṅgṛā Koṭ. It was not, however, in the northern districts alone of the Panjab that the force of the earthquake made itself felt. The Mughal monuments of Lahore and Delhi suffered from it in varying degrees, and it is a matter for wonder, indeed, that the injuries they sustained were no worse than they are, especially in the case of the lofty minarets of the mosques and some of the delicate marble fabrics of the palaces. As it was, the damage to these structures was, in truth, bad enough. At Lahore, the mosque of Wazīr Khān and the Tomb of the Emperor Jahāngīr came off worst, their minarets being severely shaken and left in a parlous condition. "The point," writes Mr. Nicholls, "where the shock was felt most seems to have been immediately above the bases of the columns of the *chhatrīs* on the minarets. As the minarets rocked to and fro, the shafts of these columns became chipped at the bottom, and at Wazīr Khān's mosque one of the shafts was left with only about two inches of bearing on the base."[1] Thanks to the energy of the Public Works' officers, steps were at once taken to prevent any further collapse of the crowning cupolas by shoring up the dangerous parts, and it is solely to the promptitude and skill with which this exceptionally risky work was carried out that we owe the preservation of these beautiful little structures. At Delhi, part of the heavy roof of the Shāh Burj in the Fort collapsed and the marble-work of the interior was badly fractured—so much so, indeed, that it has become necessary to dismantle and rebuild practically the whole pavilion. Another well-known monument that was cracked through and through, was the fine Paṭhān mosque in the Purānā Qila'[2]; while among those that have suffered more superficial injuries are the Lahorī Darwāza

[1] Annual Report of the Archæological Surveyor, Northern Circle, 1905-6, p. 25.
[2] Cf. my Annual Report, 1902-3, pp. 77—9, for a description of the mosque.

at Delhi and the Bād<u>sh</u>āhī Masjid, the tomb of Āṣaf <u>Kh</u>ān and the <u>Sh</u>ī<u>sh</u> Maḥall at Lahore.

Apart from all that the earthquake entailed, the year's campaign of conservation work was an exceptionally heavy one and not least so in the Panjab itself, where the Local Government has displayed a particularly liberal spirit towards Archæology. Of the rescue of the Chhoṭī <u>Kh</u>wābgāh—the Sleeping Hall of <u>Sh</u>āh Jahān in the Lahore Fort—from its use as a church for the British troops, an account has already appeared in last year's report and it is unnecessary to add more than that the work has now been brought to a satisfactory conclusion, and that the next step will be to lay out again the old garden in front of the Hall and to repair its marble fountains and paved walks. The problem of saving the ceiling of the <u>Sh</u>ī<u>sh</u> Maḥall with all its gilt and glass decoration from the collapse which threatened it, has proved a truly difficult one. At first it was hoped that after cautiously removing the concrete roof above, it might be possible to stirrup up the timbers of the ceiling, but though the majority of the timbers were found to be better preserved than the few which had broken, they were nevertheless too far decayed to be left without supports beneath, and accordingly they have all had to be strutted from below with a row of props down the centre of the hall, while a light iron roof supported on an independent framework has been substituted for the heavy concrete one which formerly rested on the timbers. An expedient of this kind cannot, of course, be anything but a blemish, but there was no other way of saving the old ceiling, and, indeed, it is a matter for congratulation that the ceiling has been saved at all. Certainly, the Public Works' officers, who carried out the work, deserve the greatest praise for the ingenuity with which the ponderous concrete roof was drilled through and removed piecemeal, without damaging the delicate and fragile workmanship of the ceiling underneath.

The work of rescuing ancient monuments from modern utilitarian uses has, as is well known, been one of the most notable features of conservation work during Lord Curzon's viceroyalty, and several more monuments of the Mu<u>gh</u>al epoch have been added during the past year to the list of those already saved in this way. One of the best known among them is the Dīwān-i-'Āmm at Lahore, which had done duty for many decades as a barrack-room. This hall has now been vacated by the military and all the modern accretions which hid the ancient work from view have been demolished. The whole of the superstructure and roof of the Hall prove, unfortunately, to be of British origin, but there can, of course, be no question of removing them. A particularly interesting feature of this Hall are parts of the two old railings, one of marble and one of stone, which played such an important part in the ceremonial arrangements at the darbars of the Mu<u>gh</u>als. Although we know from the testimony of contemporary European and Indian writers that such railings existed around the Halls of Public audience at Agra, Delhi and elsewhere, Lahore is the only place to my knowledge where remains of them are still to be found, though the marks of the inner rail are traceable between the outer row of pillars in the Dīwān-i-'Āmm at Delhi as well as at Agra. The rescue of the Dīwān-i-'Āmm will, it is hoped, soon be followed by that of all the group of Palace Buildings to the north of it. A committee meeting to discuss the evacuation of these structures (the finest, from many points of view, in the Lahore

Fort) was held last year under the presidency of General DeBrath, and the report, which, be it said, is entirely in favour of their being restored to their former condition, is now under consideration. Other monuments which are being recovered in a like manner from misuse, are the Rang Mahall and Naubat Khāna in the Delhi Fort. Much headway, too, has been made in demolishing a number of modern military excrescences in the old Ḥayāt Bakhsh garden there and restoring it to a semblance of its former self. In connection with the repair of the tank in the centre of this garden it may be mentioned that a slight difficulty arose as to the preservation and repair of the surrounding parapet and border. "The original tank," writes Mr. Nicholls, "had an ornamental border after the fashion of the large tanks in the Shālimār Bāgh at Lahore. Subsequently, it appears, it was decided to increase the depth of the tank, and a parapet accordingly was built on top of the ornamental border, completely concealing its projecting horns. The difficulty was to decide whether to restore the tank to its original form, which would have entailed the removal of the remaining part of the parapet, or to complete the parapet where it was broken away and leave the projecting horns of the ornamental border concealed. Had the parapet been added by the British, the proper course would have been obvious; but it bears elaborate mouldings and is evidently Mughal work and probably was built about the same time as the Ẓafar Mahall in the middle of the tank."[1] Accordingly, it was determined to repair and preserve it with the rest of the tank. Of other undertakings in the Panjab the most prominent are those connected with the tombs of the Mughal Emperors and their nobles. In the gardens round Humāyūn's Tomb the reconstruction of the channels and reservoirs has been pushed on, and about one-third of the work was completed during the year, while further improvements were effected also at the neighbouring Tombs of 'Īsā Khān and Tagah Khān. Another item that deserves mention is the acquisition, through the courtesy of the Railway authorities, of a plot of ground around Dāī Angah's mosque at Lahore, which is thus secured against the danger of having modern incongruous structures erected right against its walls.

In the United Provinces, interest has again centred mainly round the monuments of Agra, where the improvements planned by the late Viceroy have gone steadily forward. In addition to other minor works at the Tāj, the repair of the foliated balustrades on the north and west sides of the fourth Sahelī Burj has been completed, as well as the reconstruction of another of the long colonnades which surround the quadrangle in front of the entrance to the Tomb, and which add so greatly to its charms. In the Fort, a very inconspicuous, but a very necessary piece of work has been the dismantling and rebuilding of the corner bays in the Dīwān-i-'Āmm. In these pillared halls of the Mughals it almost invariably happens that the outer pillars are too weak to resist the lateral thrust of the arcades, and the Dīwān-i-'Āmm at Agra was no exception to the rule. Originally, the corner groups of pillars had four shafts standing free of each other, but it would seem that at an early date they must have shown signs of weakness, for the interspaces between them were filled in so as to bind each group together into one solid mass. Notwithstanding this, however, the arcades continued to spread, and in recent years recourse was had to tying in the columns with iron rods. But this expedient was, at the best, but a temporary one, and as fresh cracks

[1] Report of the Archæological Surveyor, 1905-6, p. 23.

continued to show themselves, it was determined to pull down the corner bays and re-erect them on more approved lines than those followed in Mug͟hal days.[1] Other more noticeable improvements effected in the Fort are the repaving of the arcades around the Dīwān-i-ʻĀmm courtyard, the repairs of the screens and balustrades in the north-east bastion of the Jahāngīrī Maḥall, and the laying out of the plot of broken and untidy ground to the west of the same building. While the last mentioned work was in progress, a discovery of some interest was made by Mr. F. O. Oertel, the Executive Engineer, in the shape of a number of foundation walls, one of which (to judge by the size of the bricks) must be many centuries anterior to the Muhammadan conquest.[2]

In connection with Delhi and Lahore, I have already referred to the systematic endeavour that is being made to recover valuable monuments from the improper uses to which they have in only too many cases been converted. At Fatḥpur Sīkrī, this policy has been responsible, during the past year, for the rescue of three particularly fine structures from misuse, namely, the Daftar K͟hāna, where the State business of the Emperor Akbar was despatched; "Mariam's Koṭhī," said to have been the residence of Jahāngīr's mother, and peculiarly interesting by reason of the painted frescoes on its walls; and the house of Bīrbal, the most ornate and beautiful of all the domestic buildings within the Palace enclosure. All these three buildings had been occupied hitherto as rest-houses for Government officials and the general public, and before they could be reclaimed it was necessary, of course, that other accommodation should be provided. Accordingly, a spacious dak bungalow was built by the Local Government on the slope of the hill just below the old mint, and, as soon as it was ready for occupation, all the modern doors and other fittings were removed from the three Palace buildings. Another valuable addition to the splendid array of monuments already conserved at this site has also been made by the purchase of the Rang Maḥall—a fine structure of red sandstone situated in the Sajjādā Nis͟hīn's quarters, to the south-west of the Buland Darwāza, and at a distance of about 200 yards from it. It is the building in which the Emperor Jahāngīr is reputed to have been born, and apart, therefore, from its architectural value, which is great, it is well worthy of being preserved if only for the sake of its historic associations.

In other districts of the United Provinces, the most noteworthy undertakings have been at Lucknow and Qanauj. At the former place, the Residency has come in for various protective measures, such as the reroofing and reflooring of the "model" room, while a beginning has also been made with the work of clearing and opening out the remains of some of the subsidiary buildings, of which little or nothing was visible above ground. In the Sikandar Bāg͟h, too, various repairs have been done to the walls and roofs of the old Bāradarī in the middle of the enclosure, and steps have been taken to support and preserve the outside wall where the British troops made their breach and where the brickwork showed signs of collapsing. At Qanauj, a monument of much interest that has been taken in hand is the mosque of Jahāniān, which dates back to 1476 A.D., and which in style resembles most closely the Paṭhān structures

[1] An interesting account of this work by Mr. F. O. Oertel, the Executive Engineer in charge of it, is given in the Annual Report of the Archæological Surveyor, Northern Circle, 1905-6, p. 7.

[2] *Ibid*, p. 18.

of Jaunpur, though it does not possess the massive propylons which are such a characteristic feature of the Sharqī architecture there. Two other memorials at the same site that have also received attention are the tombs of Kabīr Bālā and Shaikh Mahdī, which, though built, according to the inscriptions engraved upon them, in the reigns of Shāh Jahān and Aurangzeb, respectively, are remarkably alike both in size and detail.[1]

Turning aside from British territory to the Native States of Rajputana and Central India, it cannot but afford the liveliest satisfaction to the Government of India as well as to every one who is interested in the monuments of this country, that the Darbars have co-operated so heartily in the matter of conservation work. I have already described at some length in previous reports the comprehensive operations that have been in progress in the States of Udaipur, of Dhar, and of Chhatarpur. Another ruler who has taken up the work with characteristic energy, is His Highness the Mahāraja Scindia. Already during the past year the Tomb of Muḥammad Ghauth at Gwalior has been taken in hand, and no pains are being spared to carry through the work of repair in a thoroughly systematic and scientific fashion. The tomb is a particularly striking looking edifice, dating back to the early years of Akbar's reign, and is remarkable for the peculiarity of its plan with corner hexagonal towers abutting at an angle on to the main buildings and for some finely pierced screens. Besides these two monuments, the programme of repair includes the Telī-kā-mandir, the Mān mandir, the Sās Bāhu Temple, and the Gujārī Maḥall, in addition to a number of other items of less importance. The three first mentioned all came in for a good deal of attention when Major Keith was on special duty for archæological work at Gwalior between the years 1880-83, and they have all been relatively well looked after since. The Gujārī Maḥall, on the other hand, is in a sadly neglected and ruinous state and it is only the north-east façade and the north-eastern halves of the walls abutting on to it that can now be saved. What is left, however, is well worth the cost of preservation, if only as an example of one of the most attractive styles of Hindu architecture. No doubt this Palace was built at the same period and by the same hands as the Mān mandir in the Fort above, but though overshadowed by the vaster proportions and more imposing and elaborate design of the latter, it surpasses it in the refinement of a few of its finer features, among which may be noticed in particular the delicate serpentine brackets that support the eaves of the balconies, the blue inlaid screens of its windows, and the unusual restraint which marks the surface decoration generally.

Other Native States have been equally to the fore in responding to the example set by the British Government. The Alwar Darbar has shown its solicitude by repairing the tomb of Nūr Shāh; the Jhāllāwār Darbar by overhauling the ruins of Chandrāvatī; and His Highness the Mahā Rāo of Koṭāh has done whatever was necessary for preserving the Mahādevjī shrine at Kaṇsuvāṁ[2]. In Jaisalmer, the work of repairing the temple of Tanotianji was begun; in Mārwār, the temple of Jalandharanātha at Jālore received some attention, and in Bikāner, further protective measures were carried out at the Fort of Hanumāngaṛh. Some of these undertakings have been inspired, perhaps, more by religious than by archæological enthusiasm; and some of the structures, it must be admitted, possess comparatively little antiquarian interest. But, this notwithstanding, there can be no doubt that a widespread interest for matters archæological

[1] For an account of these buildings at Qanauj, cf. *ib.* pp. 88, *seqq.*

[2] Cf. *Progress Report of Western Circle, 1904-05.*

has been roused in the Native States, and the main task at present before the Archæological Department is to see that this interest is directed into the right channels. Too much fervour may occasionally lead to disastrous results, and though there are in conservation work many preliminary measures which demand no special knowledge in their execution, masonry work and more elaborate repairs ought never to be undertaken except under qualified supervision.

In the Bombay Presidency, there are only three monuments, out of the long list of those under repair during the past year, that need be singled out for special notice. Two of these are at Bījāpur, *viz.*, the Gol Gumbaz and the Ibrāhīm Rauza. As regards the former, Mr. Ahmadi, the Executive Engineer, writes that the requisite amount of stone, about which there had been a good deal of doubt, was obtained during the year from the Sholāpur District, and that seven of the massive brackets have already been fixed in place, while the dressing of others is proceeding. He states also that the iron cradle scaffolding, which I referred to in last year's report, has been found to work most admirably in carrying out this difficult and hazardous task. The work at the Ibrāhīm Rauza is progressing equally well. Already, the deep and richly carved cornices have been completely repaired on the western and northern faces, and it is hoped that next year will see the whole work brought to a finish. The third monument, to the preservation of which more than ordinary interest attaches, is the Buddhist *stūpa* at Thul Mīr Rukan, in Sind, which Mr. Cousens assigns to the third or fourth century A.D. It is a solid cylindrical structure of brick, still standing to a height of about 60 feet and decorated with two bands of pilasters in tiers and with string courses of Buddhas in various attitudes. The lowest section, unfortunately, has completely perished, but the carved brickwork in the two upper bands is singularly rich and beautiful.[1] All the lower part of the edifice was buried deep in débris, and has had to be laid bare, the débris being removed and carefully examined for terra-cotta statues and other decorative fragments which had fallen from the *stūpa*. At the same time the rough broken brickwork has been strengthened by cement and *surkhī* mortar, carefully introduced into the open joints, so as to prevent the percolation of rain water.

In the Central Provinces, the heaviest items of expenditure have been the repairs to the famous Temple of Siddheśvara at Māndhātā and to the less known shrines at Śirpur and Jānjgīr. The first named was visited by Lord Curzon at the end of 1902, and it is on the note which he left behind him and of which the following extract will be read with interest, that all the subsequent measures have been based. "I visited", wrote Lord Curzon, "this renowned and sacred island in the Nerbudda on October 31st, 1902, and was equally disappointed with its beauties and its monuments. The only building of any real character or distinction on the island is the Hindu Temple of Siddheśvara Mahādeva. But this is such an absolute ruin as to defy restoration at any but an unpardonable cost. The plinth or platform on which the ruins of the temple stand is of a very curious design, its outer edge consisting of a series of projecting and re-entering angles. The porches in front of the doorways must have been a very striking feature, but are now in a state of irreparable decay. The central shrine has been covered by some pious iconoclast with a low, stunted cupola, such as

[1] The great hole, 36 feet deep, in the middle of this *stūpa* is said to have been excavated by Sir Bartle Frere.

might be seen in a Muhammadan mosque. This ludicrous erection is in violent contrast to its surroundings and ought to be removed. I presume that the shrine has at one time been covered with the conical Hindu cupola or spire. It would not now be worth while to re-erect this; but it would seem preferable either to cover in the exposed shrine with a flat roof or possibly to put upon it one of the small pointed pyramidal roofs, of which several examples can be seen covering small Hindu shrines in the neighbourhood of the more modern temple in the town, just above the Rao's palace. The only restoration of which the temple of Siddheśvara seems to me profitably to admit, is to clear the plinth with the elephant frieze (a really noble feature) to its foundations, to cut away the jungle for a certain space around, so as to constitute a small enclosure, to remove all the fallen and broken stones and to collect against the wall any of these—and there are a great number, including some shattered elephants from the frieze—that are carved or sculptured. In this way the place might be made to look more tidy. But it can never at anything except a wholly disproportionate cost be made into anything but a ruin." The measures ordered by Lord Curzon were begun in 1904, but owing to local difficulties very slow progress was made, and it was not until last year that the work could be carried out in its entirety. The roof, it should be said, which has been erected over the *sanctum*, is flat, but sunk slightly into the top of the building so that it cannot be seen from without.

An account of the fine old brick temple of Lakṣmaṇa, at Śirpur, is to be found in Volume XVII of General Cunningham's Reports.[1] The shrine is still standing with about two-thirds of its tower, but the *maṇḍapa* is irreparably ruined. In style, the building calls to mind the ruined temple at Bhītargāon,[2] though it differs from it in many essential details and is obviously later, while the stone mouldings, sculptured ornamentation and statuary are closely analogous to much that is found at Sārnāth, Eran and other places where the Gupta style predominated.[3] The repairs to this temple have involved cutting down jungle and clearing, gravelling and fencing in a considerable space all round the building; protecting the walls and towers against water; cementing together loose brick-work; rebuilding broken corners, as well as the retaining wall of the platform; and, finally, removing all fallen débris from the *maṇḍapa*.

The third building to be noticed in the Central Provinces is the large Vaiṣṇava temple at Jānjgīr. Though more costly, the repairs here have on the whole been less difficult than at Śirpur, for the reason that the structure is of stone, and it has mainly been a matter of resetting loose and fallen blocks and protecting the masonry against the percolation of rain water. Personally, I had not seen this monument before the repairs initiated by Mr. Cousens had been taken in hand, but when I visited it at the end of 1906, I had photographs with me showing its old state of dilapidation, and it was an immense pleasure to behold its transformation and the admirable work that had been done by the Public Works Department. The style of this temple is much like that prevailing at Khajurāha, but there is good

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[1] Pages 27-8. Cf., also, *Progress Report of Western Circle*, 1903-04, p. 20.

[2] *A. S. R.*, Vol. XI, p. 40, and Plates XIV-XVII.

[3] General Cunningham assigned the date of this temple to the late fifth century. Mr. Cousens, on the other hand considers it to belong at the latest to the eighth, and this latter date is, no doubt, near the truth.

reason for assigning it to a somewhat earlier date than the examples at that site.[1] The principal images, which are arranged (as in the Khajurāha temples), in two tiers round its sides, are all Vaiṣṇava in character, while in the corners are *devīs*, dancing girls, ascetics and griffins.[2] No remains of a *maṇḍapa* exist, though it is plain that one was intended,[3] and we may assume that the building was abandoned before it was started and when the *śikhara* over the sanctum was only half completed.

Eastern India offers relatively little to interest us in the matter of conservation work during the past twelve months. Steady progress has been made in Assam with the several undertakings described by me in last year's report, but in Western Bengal the only project of any significance for which funds could be found[4] (apart from the work at the Black Pagoda) was the repair of the Sonā Masjid at Fīrozpur near Gaur. Built in the reign of Alāu-d-dīn Huṣain Shāh, this mosque is by common consent the finest of the stone buildings in and around Gaur. The prayer chamber is divided into three aisles with five domes in each. Of these fifteen domes, three had fallen at the south end of the back aisle, together with a portion of the back wall above the springers of the arches, with the result that no abutments were left to receive the lateral thrust from the other arches. This constituted the main difficulty in the preservation of the mosque, and the only possible way of meeting it satisfactorily was to rebuild what had fallen. The safety of the rest of the structure might perhaps have been indifferently secured by the erection of buttresses, but these would have had to be so heavy as materially to disfigure the edifice, and they would have cost withal not much less than the re-erection of the domes. For the rest, parts of the outside walls have had to be refaced in stone and brick, the massive stone slabs of the *takht* in the north-west corner have had to be reset, cracks in the coffered ceiling have had to be filled in, and the surroundings of the mosque have been improved by diverting the approach road and tidying up the enclosure.

Of the year's campaign of conservation work in the Southern Presidency, all that need be said is contained in Mr. Rea's contribution printed below, and I may therefore pass on, finally, to Burma, noting only that the main centres of activity in Madras have been Vijayanagar, the Seven Pagodas, Gooty, Gāṇḍikota, and Sankaridrug.

In Burma, the liberality displayed by the Local Government has made it possible not only to execute a number of special repairs to various historic monuments at Pagan, but to push on the difficult and costly reconstruction of the spire of the Mandalay Palace,[5] in addition to carrying out all the constantly recurring measures which have to be attended to systematically year by year, and which will never admit of postponement. The splendid array of pagodas and shrines at Pagan have enjoyed hitherto but a fraction of the fame to which their beauty and historic associations

[1] That is, to about the middle of the tenth century A.D. Cf. *Progress Report of the Archæological Survey, Western India*, 1903-1904, page 29.

[2] Mr. Beglar, *A. S. R.*, VII, pages 209-10, conjectured that the shrine was dedicated to Nārāyaṇa, but Mr. Cousens suggests with much plausibility that it was dedicated to Sūrya, whose image holds the place of honour in the principal niches on the west wall.

[3] Cf. Beglar, *loc. cit.*

[4] Expenditure in Bengal amounted to Rs. 31,658, but Rs. 10,020 out of this sum were absorbed by the new Plassey Memorial, which for financial purposes is classed as an archæological project. Of the remainder, Rs. 9,273 were devoted to Konārak, Rs. 7,165 to the Sonā Masjid, Rs. 661 to the Rohtāsgarh Palace, and the rest to ordinary annual repairs.

[5] For notice of the work being done here compare my Report for 1904-05, pages 8 and 9.

entitle them, nor have they yet been sufficiently well described or illustrated to allow experts, who cannot visit the site, adequately to appreciate either the character of their architecture or the light which they throw on the political and religious movements of the epoch to which they belong. An effort, I am glad to say, is soon to be made to fill in this serious blank—as soon, indeed, as the survey of the Palace buildings of Mandalay is finished.[1] Meanwhile, the monuments themselves continue to be carefully and systematically overhauled, among those which have lately been under special repair being the Thamihwet-, Hmyathat- and Kyaukku-Ōnhmins and the Ananda, Thatbyinnyu, Nagayōn, and Sulamani Pagodas. The most extensive operations of the year have been those connected with the last named monument, a five-storeyed building of vast and imposing bulk, built by King Narapatisithu towards the end of the twelfth century A.D., and decorated with many interesting frescoes. Of the repairs to it, Mr. Taw Sein Ko writes, "The building has much weathered, but the brickwork, strengthened by stone bonding, is still in a sound condition, in spite of the absence of plaster or cement on the outside. The work done is more in the nature of preservation than restoration. The stone paving was repaired, cracks in the arches were cut out and rebuilt, and all loose plaster was removed carefully, the sound portions being edged to arrest further decay. Extreme care was taken not to injure any of the valuable frescoes."

Another structure dating from the reign of the same monarch, which also calls for mention, is the Kyaukku-Ōnhmin, a unique type of temple built against the precipitous sides of a ravine about two miles to the east of Nyaung-u. It appears to have been originally dedicated as the residence of the renowned Pamsukulamahāthera, and is often mentioned in Pagan history.[2] The edifice is arranged in three terraces constructed partly of stone, partly of brick, with finely chiselled surface relieved by decorations of a singularly pleasing character. The dilapidations here were mainly on the west face of the building, where, owing to settlement, the brickwork had been forced out of position. In order to give sufficient support to the superstructure, the whole of the basement wall of the main portico had to be carefully rebuilt. The roofs of the terraces also were repaired in concrete, and the lighting and ventilation of the interior were much improved by opening out an old door which had been bricked up and by dismantling other later obstructions.[3]

J. H. MARSHALL.

[1] This survey of the Palace Buildings at Mandalay has had to take precedence of all else, owing to the perishable nature of those wooden structures.

[2] Cf. Dr. Forchhammer's *Report on Pagan*. There appears to be no evidence for his statement that the monk Ariyadhamma lived in it.

[3] Cf. *Report of the Superintendent, Archæological Survey, Burma*, 1905-06.

ANCIENT MONUMENTS OF KĀṄGṚĀ RUINED IN THE EARTHQUAKE.

THE disaster of the 4th April 1905, appalling by reason of the wholesale destruction of human life and property, is still fresh in everyone's memory. It befell a district richer in ancient Hindū monuments than any other of the Panjāb. The very centre was the famous Nagar-kōṭ, a store-house of relics embodying its eventful history. There was, therefore, every reason to apprehend that archæology also would have to deplore many an irreparable loss. The damage done to ancient buildings by the earthquake has indeed been very considerable, not so great, however, as at the outset the extent of the catastrophe gave cause to expect. The historical fort of Kāṅgṛā has been turned into a mass of ruins. Its rock-built ramparts which it took the hosts of Hindūstān many months to scale, have been hurled down in a few seconds by the mighty hand of Nature. Of the ancient buildings sheltered within its walls, only a few still stand isolated among the spoils of their neighbours. The lofty temple, which reared its guilt dome over the lowly dwellings of the suburb Bhavan, has been levelled with the ground. On the other hand, the main shrine of Baijnāth, less renowned for its sanctity, but infinitely superior in antiquarian interest, has marvelously escaped the general wreck, not, however, without serious injury. As to the smaller temple of Sidhnāth, its ruinous state gave little hope that it would withstand the shock; it is no wonder that the earthquake has completed its doom.

It is a fact worth recording that among the numerous inscriptions found in the district not a single one—not even that preserved in the Bhavan temple—has been injured or lost. To students of Indian palæography it will be especially gratifying that the two valuable Śāradā *praśastis* of Baijnāth are safe. Two inscribed stones from the Kāṅgṛā Fort had been removed to the Lahore Museum only a few months before the earthquake through the care of the Executive Engineer, the late Mr. F. Farley. I cannot omit mentioning that to the same officer, who himself was one of the victims of Dharmsālā, we owe the discovery of a Buddhist *stūpa* near Caitru (map Chetru), about half-way between Bhāgsu and Kāṅgṛā town—the first monument of its kind noticed in the Kāṅgṛā valley.

It will be my object in the present paper to give an account of the injury done to ancient buildings in the Kāṅgṛā valley. In the course of a week's tour, made in



1904.



1905.

JAHANGIRI DARWAZA.

November 1905, I inspected Kāṅgṛā town and Baijnāth. Regarding the monuments of secondary importance information was procured by the Public Works officers in charge of the district. The scope of this publication does not admit of a complete description being given of all the monuments to be dealt with, which would rightly claim a separate volume. Only such points as are of interest for the history of the buildings, I shall take the opportunity briefly to discuss. I may mention in this connection that a series of drawings relating to the Kāṅgṛā district was prepared in the year 1887-88 under the supervision of my predecessor, the late Mr. C. J. Rodgers. These now form a valuable record of buildings which partly have become disfigured and partly have ceased to exist. It is hoped that ere long they will form the subject of a separate publication of the Archæological Department. To illustrate the present paper, I have selected a set of photographs taken before and after the earthquake which, in conveying an adequate idea of its disastrous action, will be more eloquent than any detailed description.

Kāṅgṛā.

Kāṅgṛā, the ancient Trigarta, occupying the lower valley of the Biās and its tributaries, was from very remote times one of the leading hill states of the Panjāb. During the pre-Muhammadan period it made part of the kingdom of Jālandhara. When the plains of the Pānjāb were subjugated by the Muhammadans, the kings of that principality, reduced to their territories in the hills, retained in the Kāṅgṛā fort a stronghold which more than once baffled the attempts of Moslim invaders.

"The fort of Kāṅgṛā," says Jahāngīr in his Memoirs, "is old and situated north of Lahore in the midst of a mountainous country. It is famous and renowned for its strength, stability, strong fortifications and impregnability. No one but the God of the whole world knows when it was founded. The belief of the landholders of the Pānjāb is that in all that time the fort has never changed hands and the hand of the stranger has never been laid upon it. Knowledge is with God. In short, from the time that the news of the true religion of Muḥammad reached India, not one of the mighty emperors has conquered it." The last statement of the royal chronicler is far from correct. The fort of Kāṅgṛā was taken by the irresistible Maḥmūd of Ghaznī in A.D. 1009. In 1337 it was captured by Muḥammad Tughlaq and again in 1351 by his successor Fīrōz Shāh. But it did not fall into the Muhammadan power permanently until 1621, when after a siege of fourteen months[1] it was conquered by Jahāngīr, who garrisoned it with his troops and appointed a Mughal governor to keep the turbulent hill chiefs in check. The surrounding district, however, with the exception of the imperial desmesne, remained in the hands of the Kaṭōc Rājās, who claim descent from the ancient rulers of Trigarta.

When in the second half of the 18th century the Mughal power rapidly declined, Rājā Saṁsār Cand II succeeded in 1786 in recovering the ancient fortress of his

[1] According to the Tuzuk-i-Jahāngīrī the fort was invested on the 16th of Shawwāl A.H. 1029 (5th September A.D. 1620) and captured on the 1st of Muharram A.H. 1031 (6th November A.D. 1621). The respective dates given in the Bādshāh Nāma are the 24th of Shawwāl A.H. 1028 (24th September 1619) and the 25th of Zil Hijja H. 1029 (11th November 1620)

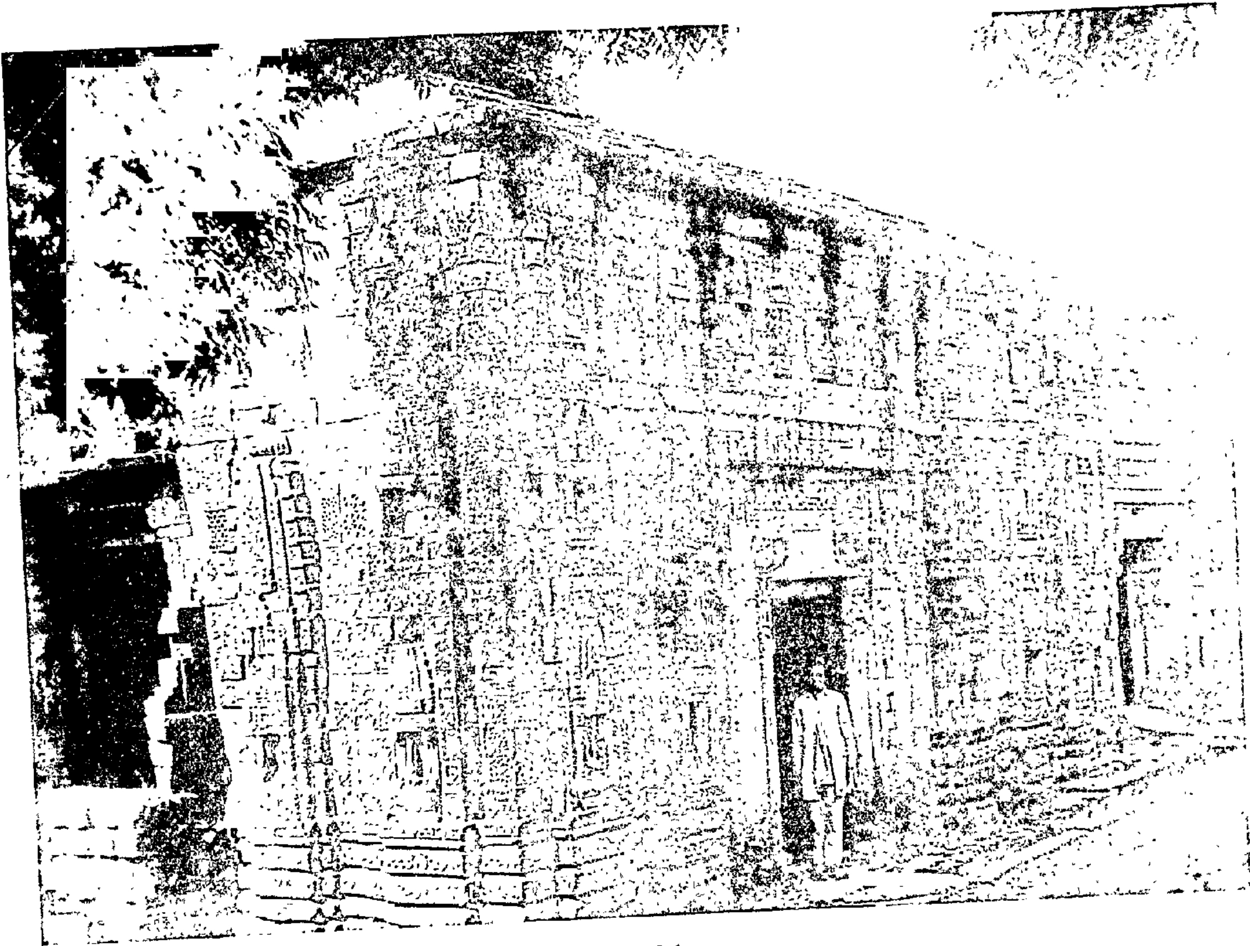
ancestors. But by carrying his ambitious designs too far, he came into conflict, first with the neighbouring hill chiefs, then with the Gurkhās and finally with Ranjīt Singh to whom he was compelled to surrender the Kāṅgṛā Fort in 1809. It remained in the hands of the Sikhs till 1846 when it was made over to the British Government along with the hill country as far as the Rāvī. Up to 1900 it was garrisoned by British troops.

"The fort of Kāṅgṛā," says Cunningham,[1] "occupies a long narrow strip of land in the fork between the Mānjhi and Bān Gangā rivers. Its walls are upwards of two miles in circuit, but its strength does not lie in its works, but in the precipitous cliffs overhanging the two rivers, which on the side of the Bān Gangā rise to a height of about 300 feet. The only accessible point is on the land side towards the town; but here the ridge of rock which separates the two rivers is narrowed to a mere neck of a few hundred feet, across which a deep ditch has been hewn at the foot of the walls. The only works of any consequence are at this eastern end of the fort, where the high ground appears to be an offshoot from the western end of the Malkera hill, which divides the town of Kāṅgṛā from the suburb of Bhawan."

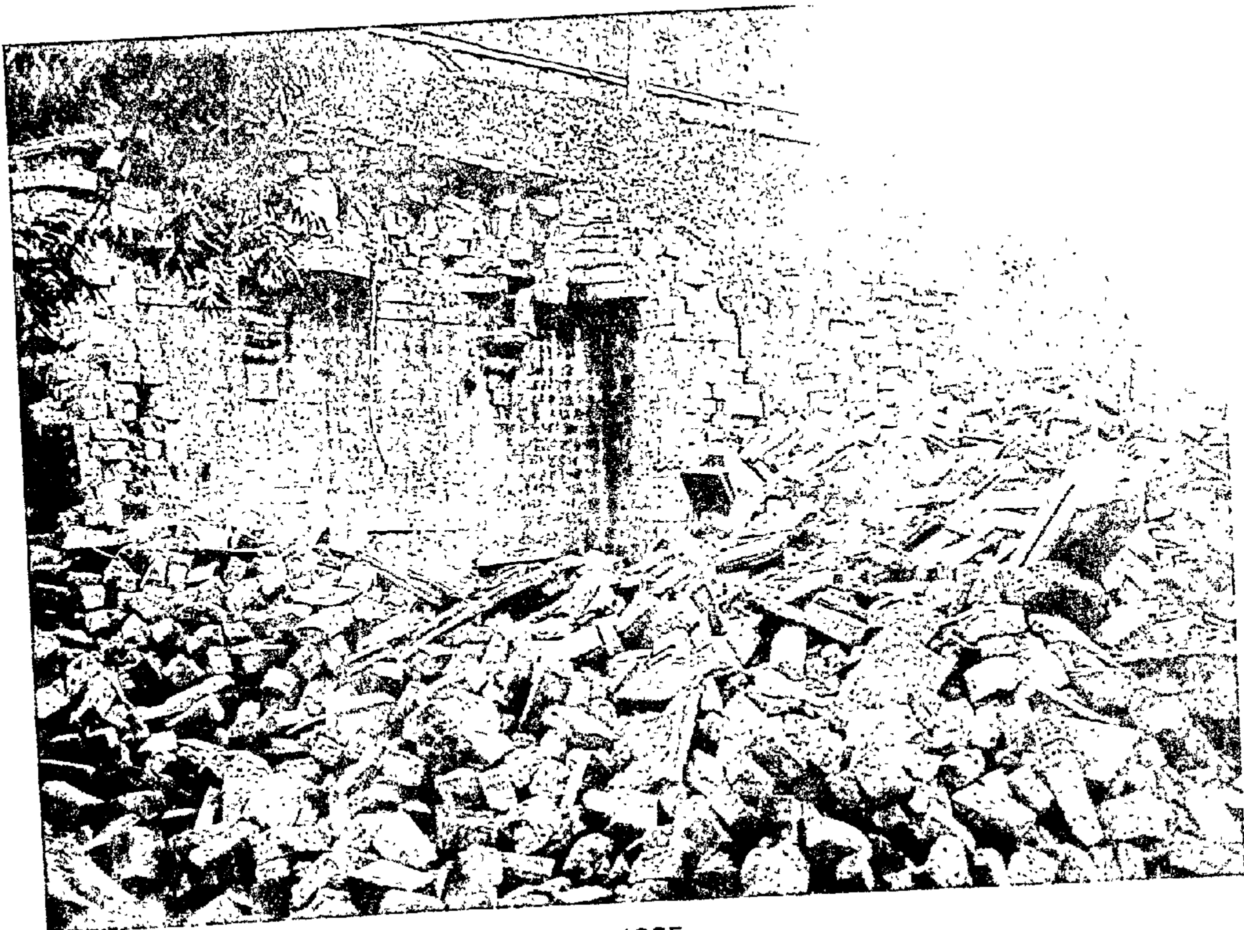
The fort is entered through a small courtyard enclosed between two gates which are known as Phāṭak and only date from the Sikh period, as appears from an inscription over the entrance. These gates which possess no archæological interest are still standing. From here a long and narrow passage leads up to the top of the fort, through the Āhanī and Amīrī Darwāza, both attributed to Nawāb Alif Khān, the first Mughal governor of Kāṅgṛā. Some 500 feet from the outer gate the passage turns round at a very sharp angle and passes through the Jahāngīrī Darwāza. Cunningham notes that this is said to have been the outer gate of the fortress in Hindū times, but that its original name is unknown. This statement may be correct, if interpreted in the sense that the outer gate of the fort originally stood on this spot. But the Jahāngīrī Darwāza has all the appearance of a Muhammadan building and, judging from its name, would seem to have been raised by Jahāngīr after his conquest of the fort.

The following fact points to the same conclusion. In the temple of Ambikā Devī, to be noted presently, I discovered two fragments of a white marble slab containing an incomplete inscription in Persian. The obverse of each fragment is carved with a trident (*triśūla*) between a pair of footprints. Evidently the stone has been taken from some Muhammadan building and converted into two footprint slabs (*pādukā*), presumably at the time when the fort was occupied by Rājā Saṁsār Cand II. Such slabs, placed on the top of rough masonry pillars, are frequently met with in the Panjāb Hills. As Cunningham does not notice the inscription in question, it must have come to light since his visit to Kāṅgṛā. But no information is locally available regarding its find-spot. I have, however, little doubt that the inscription originally stood over the Jahāngīrī Darwāza, where an oblong sunk panel will be seen, evidently meant to contain an inscribed stone. The open space measures 8′ 8″ in width and 1′ 8″ in height, whilst the two fragments combined are 2′ 4″ wide and 1′ 7½″ high. The height of the panel, therefore, closely agrees with that of the preserved fragments.

[1] A. S. R., Vol. V, pp. 192*f*.



1904.



1905.

TEMPLE OF LAKSMI-NARAYANA.

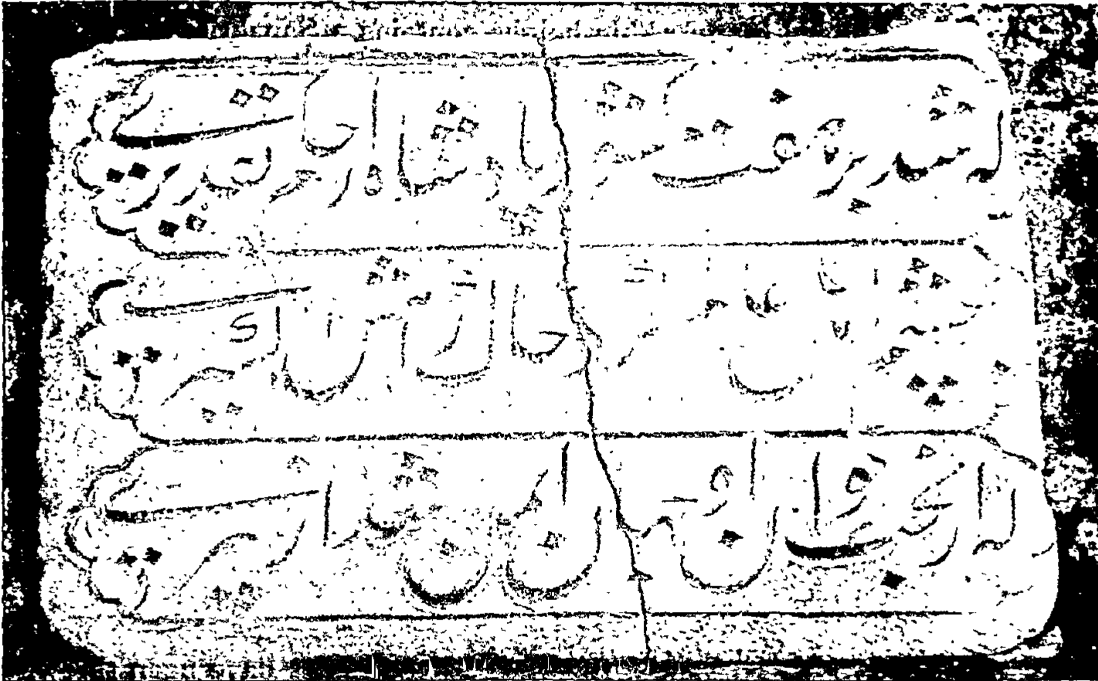


Fig. 1. Persian Inscription from Kāngṛā Fort.

The following is a transcript and a translation of this inscription for which I am indebted to Maulawī Muḥammad Shu'āib.

که شد بر هفت کشور پادشاه از حکم تقدیري
بچشم اهل عالم کرد خاک راهش اکسیري
که از بخت جوان او جهان ایمن شد از پیري

Kih shud bar haft kishwar pādshāh az ḥukm-i-taqdīrī
Ba chashm-i-ahl-i-'ālam kard khāk-l-rāhash iksīrī.
Kih az bakht-i-jawān-i-ū jahān aiman shud az pīrī.

TRANSLATION.

" (He) who became king of the seven climes through the divine order,
Made the dust of his path like balsam (*lit.* elixir) to the eyes of the world,
(He) through whose youthful luck the world has become safe of old age."

It will be seen that the preserved portion of the inscription consists of three hemistychs (*miṣra's*) which must have formed the second halves of three couplets. The whole inscription presumably consisted of six couplets, as the existing fragments would occupy about one-fourth of the space over the Jahāngīrī Darwāza. If this assumption is correct, it may be surmised that the first three couplets also rhymed with *-īrī* and that the concluding words of one of them was " Jahāngīrī." At any rate, I have little doubt that the *pādshāh* referred to in the inscription was Jahāngīr who prided himself so much on the conquest of the Kāṅgṛā Fort, " a work," as he asserts in his own Memoirs, " which no other Emperor of Delhi has been able to perform."

The two fragments, as stated above, were removed to the Lahore Museum shortly before the earthquake, together with another inscribed stone noticed by Cunningham

in the facing of the scarped rock just outside the gate of Jahāngīr.[1] This stone which measures $23\frac{3}{4}''$ in width and $5\frac{1}{2}''$ in height contains a Sanskrit inscription in six lines, mostly obliterated, to which Cunningham assigned a date not later than the 6th century. Judging from the character, this epigraph seems to me to be several centuries later, though perhaps Cunningham was right in calling it the oldest inscription of Kāṅgṛā—to wit of Kāṅgṛā Kōṭ—not of the district. It is apparently composed in poetry, and opens with a śloka containing an invocation of Viṣṇu. In the fifth line the word *kāritaṁ* is still legible, from which it may be inferred that the inscription recorded the construction of some building, perhaps a temple (*devakulaṁ*). Possibly a careful study of the original will lead to its general purport at least being determined. But the lettering is so much defaced that we cannot hope ever to obtain a complete reading.

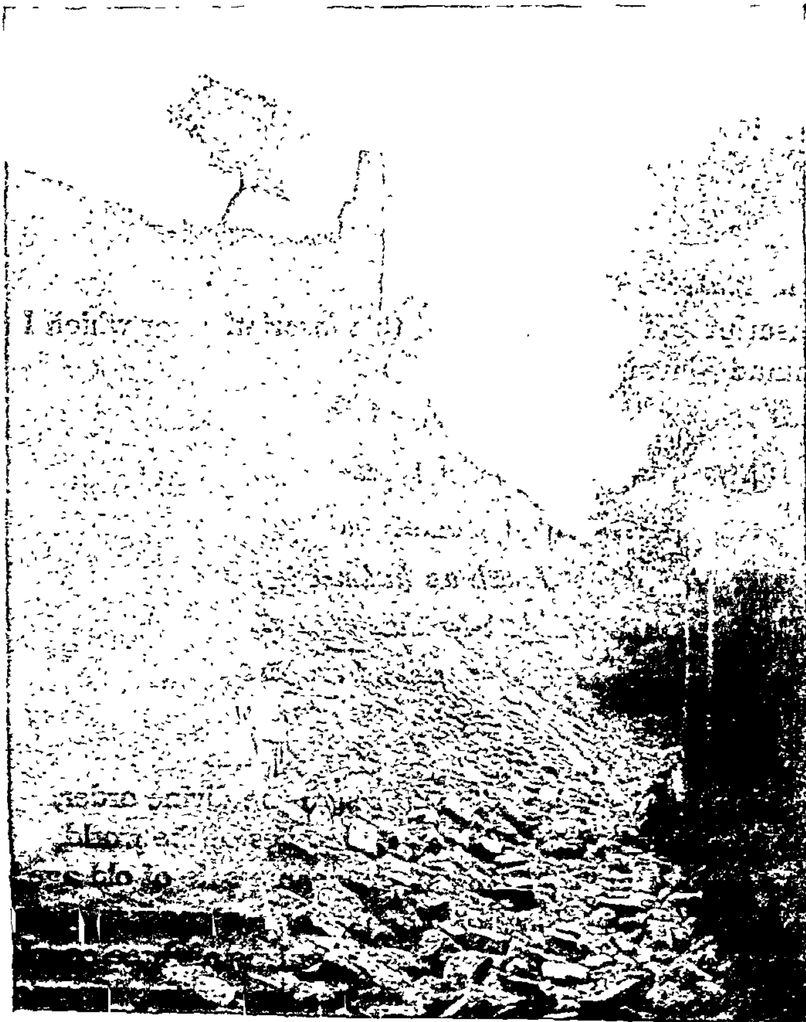


Fig. 2. Approach to Kāṅgṛā Fort.

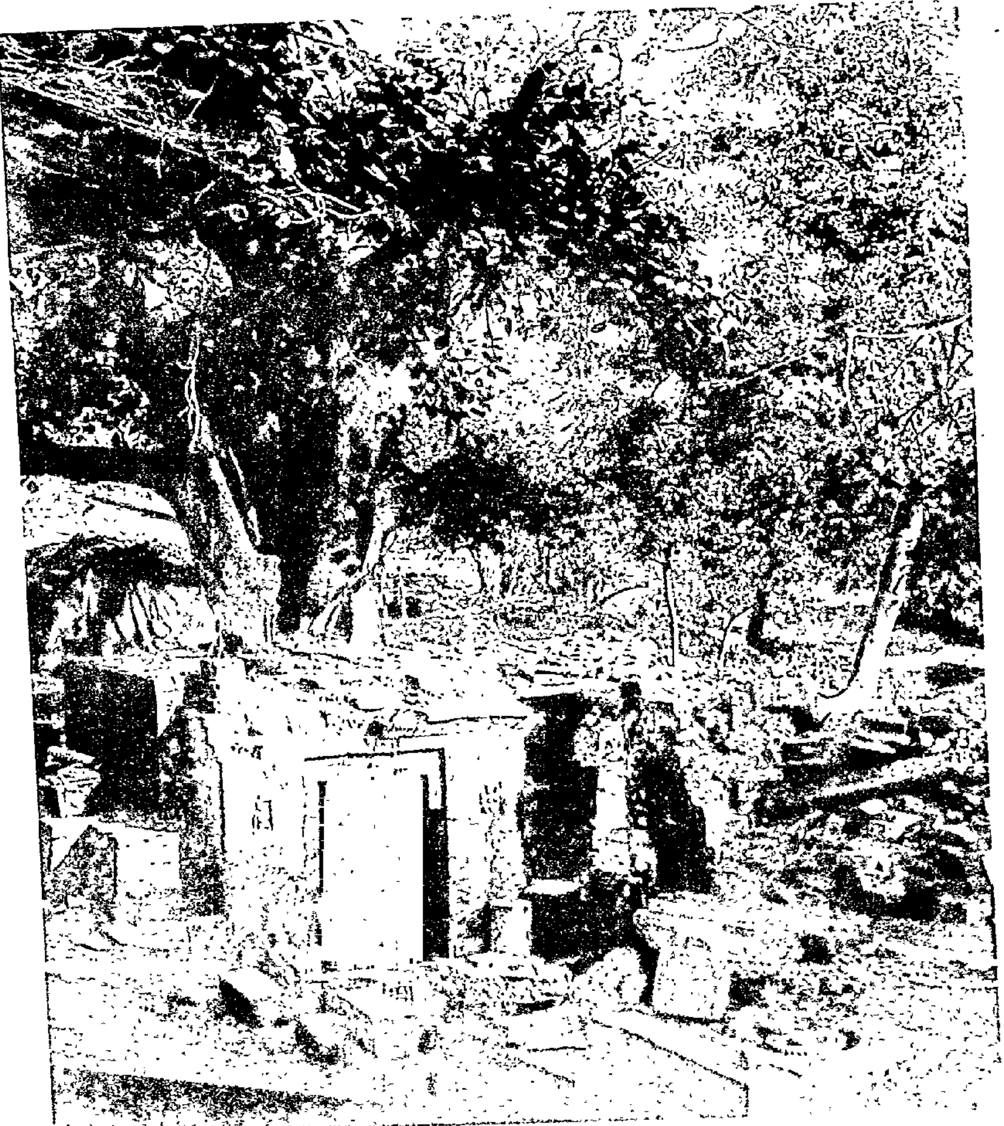
Along the whole distance from the Phāṭak to the gate of Jahāngīr, the walls on both sides of the passage together with the Āhanī Darwāza have been thrown down as by a huge landslip. The Amīrī and Jahāngīrī Darwāza are still extant, but have received serious injury (see Plate I). It is intended to restore both these gates by rebuilding the portions above the arch. The Andherī or Handelī Darwāza is ruined, likewise the Darsanī Darwāza, which was flanked by defaced statues of the river goddesses Gaṅgā and Yamunā. This gateway gave access to a courtyard, along the south side of which, facing north, stood the shrines of Lakṣmī-Nārāyaṇa, Sītalā and Ambikā Devī. Between the two last-mentioned buildings a stair-case led up to the palace, a structure of no architectural interest.

By far the most valuable monuments in the Kāṅgṛā Fort were the so-called temples of Lakṣmī-Nārāyaṇā and Sītalā—two square chambers profusely decorated with carvings (see Plate II). Cunningham's remark that they are without pillars

[1] In the Museum collection of inscriptions the stones are marked Nos. 160 and 161, respectively.



1904.



1905.

TEMPLE OF INDRESVARA.

or pilasters is due to an error, as the roof of each was supported by four ornamental pillars, whilst a pair of engaged columns flanked their entrances. The ceiling of the Lakṣmī-Nārāyaṇa temple was remarkable for its elaborate decoration. The destruction of these two buildings is perhaps the severest loss which archæology has suffered in the disaster of the 4th April. It is questionable whether they have been rightly designated as temples[1]. There is no indication that they ever contained any object of worship. Their ornamentation, however, leaves no doubt that they were originally intended for religious purposes. Judging from their general plan, they might be called *maṇḍapas*, but there is no evidence that they were attached to a temple. The smaller of the two was undoubtedly a building complete in itself, provided with a niche in the centre of the back wall outside. Its south-east corner alone is engaged in the retaining wall of the upper terrace on which the palace buildings are raised. Of the so-called Lakṣmī-Nārāyaṇa temple the back is entirely engaged, so that it is impossible to decide whether any shrine was attached to it. Interiorly, the back wall shows no trace of having contained a doorway leading into such a shrine. As the back wall is still standing, it will be possible, on some future occasion, to ascertain this point. Regarding the date of these buildings nothing is known. We may safely assume that they are posterior to the sack of the fort by Maḥmūd of Ghaznī.

The temple of Ambikā Devī, still used for worship, is a much plainer structure, evidently of no great age. The only ancient portions seem to be the pillars and architraves of the *maṇḍapa* or anteroom which originally must have been an open twelve-pillared pavilion, roofed over in the corbelling fashion of Hindū architecture. By bricking up the intercolumniations, the pavilion was converted into a square chamber now covered by a flat dome. The latter feature indicates that this reconstruction happened during the Muhammadan occupation. The adjoining building used as the shrine proper, I take to be a monument of the short period during which Saṁsār Cand held the Kāṅgṛā Fort. The clumsy shape of the spire bears ample evidence of its late date. It is a curious instance of the capricious action of the earthquake that this building was annihilated, whereas the adjoining *maṇḍapa* does not show any sign of injury. To the south of the Ambikā temple are two small Jaina shrines, facing west. One of them contains merely a pedestal which must have belonged to a Tīrthaṁkara image. In the other is placed a seated statue of Ādinātha with a partly obliterated inscription dated, according to Cunningham, *Saṁvat* 1523 *i. e.*, A.D. 1466 in the reign of Saṁsār Cand I.

Plate III shows the temple of Indreśvara in Kāṅgṛā city. It is ascribed to Rājā Indra-candra whose name, according to a common practice, is coupled with that of the deity (Īśvara, *i. e.*, Śiva) to whom the temple is dedicated. If this Indra-candra may be identified with the Indu-candra of Jālandhara, mentioned in the Rājataraṅgiṇī (VII, 150) as a contemporary of Anantadeva of Kaśmīr (A.D. 1028-63), it follows that the Indreśvara temple dates from the 11th century. The only interesting portion of the building is the open pavilion supported on four ornamental pillars which shelters Śiva's bull Nandi. To the east of this pavilion is the shrine containing the *liṅga* which forms the object of worship. Most of the inner space is taken up by the roots and stem of a huge banyan tree, which overshadows the building. To the south

[1] Dr. Bloch suggests that they are possibly unfinished temples and quotes the instance of the Black Pagoda of Konarak.

of the pavilion is another chamber which seems to have been the original shrine. On both sides of its entrance are the two Jaina images described by General Cunningham. Apparently these images do not form an integral part of the building, so that they cannot be considered as a proof of the shrine having originally been a Jaina temple. One of the two images bears an inscription dated in the year 30 of the Lokakāla or Saptarṣi era. It was edited by Dr. Bühler who, on account of the similarity of the script to that of the Baijnāth *praśastis*, believed the date to correspond to A.D. 854. As, however, the date of the Baijnāth inscriptions is not A.D. 804, as was hitherto supposed, but 1204, we must, on the strength of the above argument, assume for the Jaina image also a much later date, perhaps A.D. 1154 or 1254. Unfortunately the most important and at the same time the most delicate portion of the temple—the four-pillared pavilion—has been levelled with the ground. The rest of the building is safe, including the two Jaina images just noted.

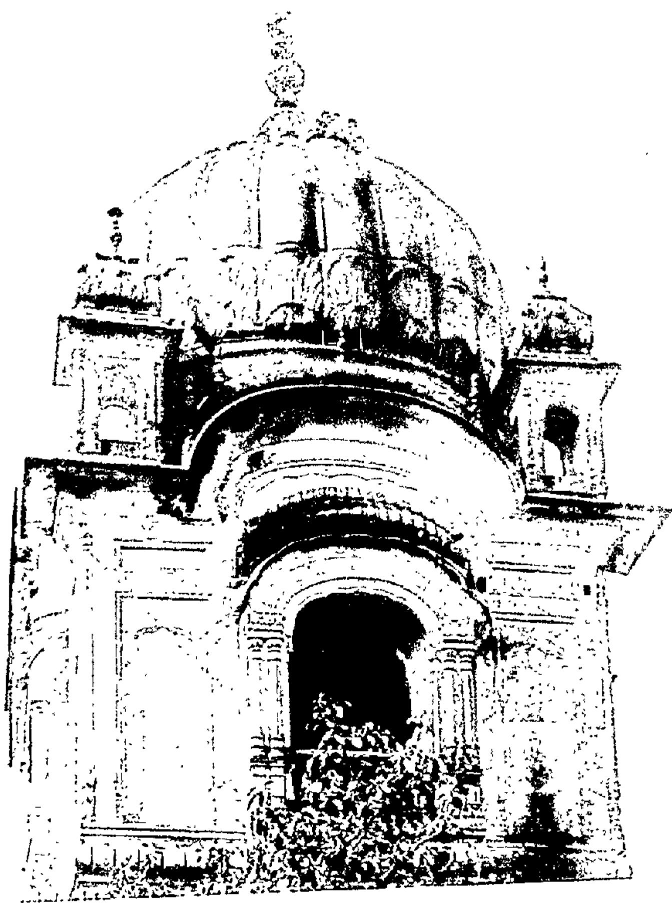


Fig. 3. Temple of Vajreśvarī (1905).

The most celebrated sanctuary of the Kāṅgṛā district—though by no means foremost in antiquarian interest—was the temple of Vajreśvarī or Mātā Devī at Bhavan, the suburb of Kāṅgṛā town. There can be little doubt that from very remote times the spot was held sacred, but the temple, which fell a victim to the earthquake, was not of very great age. An extensive Sanskrit inscription[1], preserved in the porch of the temple, records that it was built in the reign of Sāhi Mahammada, who has been identified by Cunningham with Muḥammad Sayyid who reigned at Delhi from A.D. 1433 to 1446. At the time of its foundation Saṁsār Cand I was Rājā of Kāṅgṛā.

[1] *Cf.* Bühler., *Epigr. Ind.*, Vol. I, p. 190 ff.

MONUMENTS OF KANGRA.





TEMPLE OF VAJRESVARI, 1901.

It appears from the inscription that the year of his accession was A.D. 1429-30. The record also mentions the names of his father Karam Cand (Sanskrit-Karma-candra) and of his grandfather Megh Cand (Sanskrit-Megha-candra).

The temple, the foundation of which is recorded in the inscription, was entirely renovated by Dēsā Singh, the Sikh Governor of Kāṅgṛā. Before the earthquake it presented the appearance of a square tower decorated with balconies and kiosks in the gaudy style of the period, and surmounted by a bulb-shaped ribbed dome, which, according to Cunningham's informants, was gilded by Cand Kuar, the wife of Mahārājā Sher Singh (see Plate IV). That this pretentious structure still contained the original building, has become manifest since the earthquake. For among the spoil scattered over the courtyard could be seen the spire of the ancient temple which had come down in one solid mass of masonry. The lower portions of the walls remained standing. To this circumstance is due the fact that the inscribed slab has received no injury. It will be replaced in the new temple which the Hindū community intends to raise on the spot.

Baijnāth.

The temples of Baijnāth, the most important monuments of the Kāṅgṛā valley, have been described by Cunningham, Fergusson and Burgess. The published accounts, however, are far from accurate. Cunningham's note is too brief to do full justice to the subject, and the accompanying plates are inadequate to remedy the defects of his text. He failed, moreover, in several respects rightly to interpret the epigraphical records preserved in the main temple. Fergusson did not know the temples from personal inspection, but relied entirely on Cunningham's communications.[1] Only since Bühler's scholarly edition of the Baijnāth *praśastis* has it become possible to discuss the history of the temple to which they belong. Unfortunately one point of primary importance—the date of the inscription – still remained open to doubt. Dr. Burgess' note which accompanied Bühler's article was evidently based on the drawings supplied by Mr. Rodgers—the same which I have already mentioned in the present paper.

The village Baijnāth is situated twenty-three miles east of Nagar-Kōṭ, as the crow flies, close to the border of the petty hill state of Maṇḍī and on the main road which leads from the Pānjāb plains through Kāṅgṛā, Kulū, Lahul and Ladākh to Central Asia. These two circumstances account for its existence. The mention of a custom-house (Sanskrit *maṇḍapikā*) in one of the Baijnāth *praśastis* (II,30) would indicate that as far back as the beginning of the 13th century the place was a frontier station.

William Moorcroft, when visiting Kāṅgṛā on his fatal journey to Bukhārā in the summer of A.D. 1820, duly noticed, "Baidyanath Maharaj or Iswar Linga, a shrine of Siva and place of religious resort," situated in the north-east extremity of the Kāṅgṛā valley which in those days still formed a semi-independent hill state ruled by the famous Katōc Rājā Saṁsār Cand. Under his son and successor Anrudh Cand the Kāṅgṛā principality was finally annexed by Ranjit Singh. "Baidyanathpur," Moorcroft says, "is a most miserable place, containing only a few huts and grainsellers' shops. I had much difficulty in finding shelter from the rain. I did not go into the

[1] Cunningham *A. S. R.*, Vol. V, pp. 178 ff. Plates XLIII and XLIV. Fergusson *History of Indian and Eastern Architecture* (London. 1899), pp. 314 ff. Bühler. *The two praśastis of Baijnāth. Epigr. Ind.*, Vol. I, p. 97 ff., *Cf.* also Vol. II, pp. 482 f.

temple, but was informed that it presented nothing remarkable."[1] It is strange that the distinguished traveller so readily accepted a statement with which certainly few students of Indian archæology will agree. It will be seen from the quoted passage that Baijnāth is in reality the name of the chief temple dedicated to Śiva Vaidyanātha (Lord of Physicians) by which the village itself has become known. This fact illustrates the high renown which the Baijnāth temple enjoyed in the surrounding mountain tracts. Instances of localities being named after famous sanctuaries are not unfrequently met with in India, one of the most conspicuous being Trilōknāth in Chambā-Lahul, which has received its name from the shrine of Avalokiteśvara, "the lord of the three worlds."[2]

The original name of the village we learn from the two Śāradā inscriptions, preserved in the Baijnāth temple, to have been Kīragrāma. "There is in Trigarta," that record (II, 10) states, "the pleasant village of Kīragrāma, the home of numerous virtues where that river called Bindukā, leaping from the lap of the mountain, with glittering wide waves resembling playing-balls merrily plays, like a bright maiden in the first bloom of youth. That [village] is protected by the strong-armed Rājānaka Lakṣmana."[3]

Trigarta, the ancient name of the Kāṅgrā valley, occurs frequently in Sanskrit literature. The Bindukā, so well described by the poet, is the modern Binnu, a tributary of the Biās. The name Kīragrāma, known up to the present day, seems to indicate that the village owed its origin to a settlement of Kīras, a tribe located in the neighbourhood of Kaśmīr and mentioned both in the Rājataraṅgiṇī (VIII, 2767) and on two Campā copper plates of the 11th century. We may perhaps go so far as to assume that the kings of Trigarta had garrisoned their frontier town with a detachment of these Kīras, who figure in Chambā history as a warlike tribe employed by the Ḍogrā Rājā, against Sāhilla the founder of Chambā town.

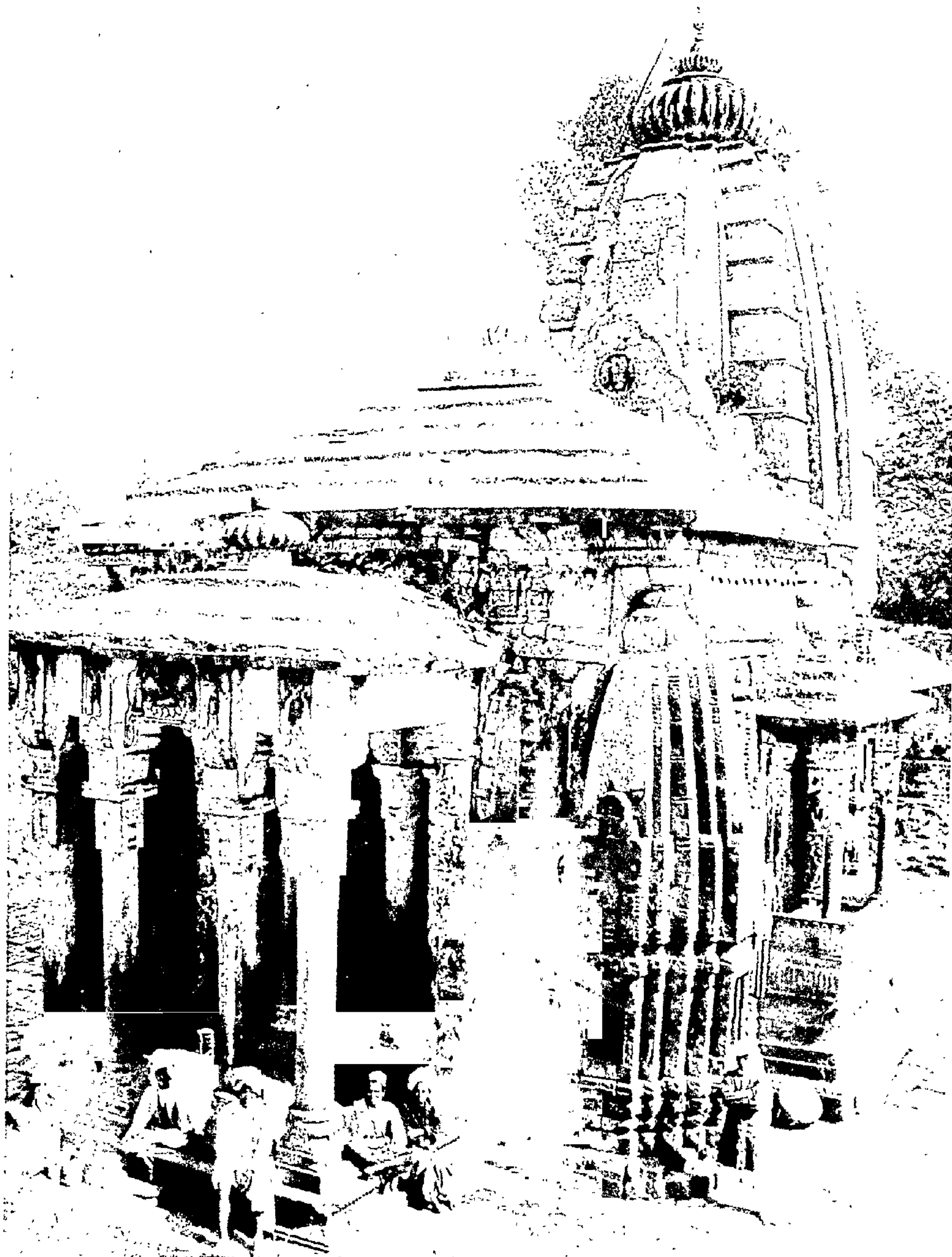
This much is certain, that at the time of the Baijnāth inscriptions Kīragrāma had for eight generations been the seat of a feudal chief who owed allegiance to the kings of Trigarta or Jālandhara. The site of the castle in which the barons of Baijnāth resided, is still pointed out in a locality known as Jhakhpur and now occupied by the Dâk Bungalow. Old men remember having seen remnants of walls and tanks on the spot, and small copper coins are said to have been found there in great numbers. The title *rājānaka* found in the inscription is a sanskritized vernacular term corresponding with modern *rāṇā*. There is a tradition that once the whole of the Panjāb Hills was ruled by *rāṇās*. In some tracts, *e.g.*, the upper Candrabhāgā valley, their rule extended down to recent times. In Chambā State numerous inscriptions have of late years come to light which are due to *rāṇās* and show that they were still numerous and powerful in the 11th and 12th centuries. But it is evident that they acknowledged the Rājā of Chambā as their overlord.

[1] Moorcroft and Trebeck: *Travels in the Himalayan Provinces of Hindustan and the Panjab.* London, 1841, Vol. I, pp. 139 and 152.

[2] Dr. Bloch informs me of the existence of a place called "Baidyanath" in the Sonthal Parganas District of Western Bengal. The name is derived from the famous *liṅga* called Vaidyanātha which is now worshipped there and which is believed to cure leprosy, one of the main diseases of that country. The locality also goes by the name of "Deoghur," the house of God.

[3] My version differs from Bühler's in that I have connected *kanduka* with the proceeding *sphurad-uru-lahari* and not with the following *Bindukākhyā*. From the modern form Binnu it may be inferred that the name of the river was Bindu (kā) and not Kandukā bindukā. The forms Binoa (Moorcroft, and Kāṅgrā Gazetteer) and Binwa (Cunningham) do not agree with local pronunciation. The correct form given on survey sheet No. 47 is Binnu derived by assimilation from the anceint Bindu (kā).

MONUMENTS OF KANGRA.



TEMPLE OF BAIJNATH, 1905.

Lakṣmaṇa, the *rājānaka* of Kīragrāma, was a vassal of Jayaccandra, the ruler of Trigarta. It is stated in the inscription (II, 18) that his mother Lakṣaṇā was a daughter of Hṛdayacandra of Trigarta. The fact that Lakṣmaṇa's father had received a daughter of his liege-lord in marriage shows the political importance of these barons of the Mountains. It is indeed contrary to the custom now prevailing in the hill states according to which ruling chiefs only intermarry with their equals, including however those land-holders (*jāgīrdārs*) whose ancestors are known to have held that position.

The inscription further records that in Lakṣmaṇa's barony (*raṇhun*) there lived "a well-known merchant, the son of Siddha, named Manyuka; whose younger brother, undivided [from him] in property and solely intent on pious works, is called Āhuka and whose blameless wife is named Gulhā. By him, a bee in the park of devotion, and by his brother, has been erected this temple of [Śiva] the Slayer of Tripura, at the door of which stand the statues of Gaṅgā, Jamnā and other [deities] together with a Maṇḍapa......The high-minded son of Āsika, named Nāyaka, who is at the head of masons, came from Suśarman's town to this [village], likewise Ṭhoḍhuka, the son of Sammana. By these two together has the very lofty temple of Śiva been fashioned with the chisel as well as the Maṇḍapa; [it has been] constructed in accordance with the opinion of Śāmu and on it glitter the figures of the crowd of the Gaṇas." It is interesting to find that the architects employed by the two pious merchants came from Kāṅgṛā town. For there can be little doubt that Bühler was correct in identifying Suśarmapura with that place.[1]

Before giving an account of the Baijnāth temple, it will be necessary to discuss the important question of its date which has given rise to a great deal of misconception. The date of the two *praśastis* is expressed both in the Saptarṣi (or Śāstra) and in the Śaka eras. The Śaka date is found on both stones, but in each instance the figures are indistinct. As the Śāstra year is 80, it follows that in any case the date must fall in the 4th year of some Christian and the 26th year of some Śaka century. The Śaka date was first read by Cunningham as 726 corresponding with A.D. 804. This reading was adopted by Bühler[2] and has since been generally accepted. Bühler, however, remarked that the further specification of the date in inscription No. I raised a difficulty, as in the year 804 that date (Jyaiṣṭha *śuti* 1) fell on a Tuesday and not on a Sunday as stated in the inscription.

A examination of the original document has convinced me that on the second stone the Śaka year is expressed by four figures, the first and second of which are undoubtedly the symbol for "one." The first of these two figures has a somewhat uncommon appearance, the concave side being turned downwards, which has led Cunningham to his reading "seven." Instances of Śāradā "one" being expressed in that manner are, however, not wanting in the inscriptions of Chambā State. The symbol for "seven" is always distinguished by a tail. The second figure is a normal and very distinct Śāradā "one." The upper portion of the third figure is broken, but enough remains to show that it represents the numeral "two." The fourth figure, that of the units, is unrecognisable, but from what has been remarked above, it will be evident that it can only be "six." Moreover, on the other stone this

[1] *Cf.* Jonarāja's *Second Rājataraṅgiṇī*, *śloka* 443.
[2] *Cf.* also his *Indian Palæography* (translation Fleet), p. 57 and Table V, Column 1.

figure is still traceable and presents the appearance of that symbol. The result is the Śaka year 1126 corresponding with A.D. 1204.

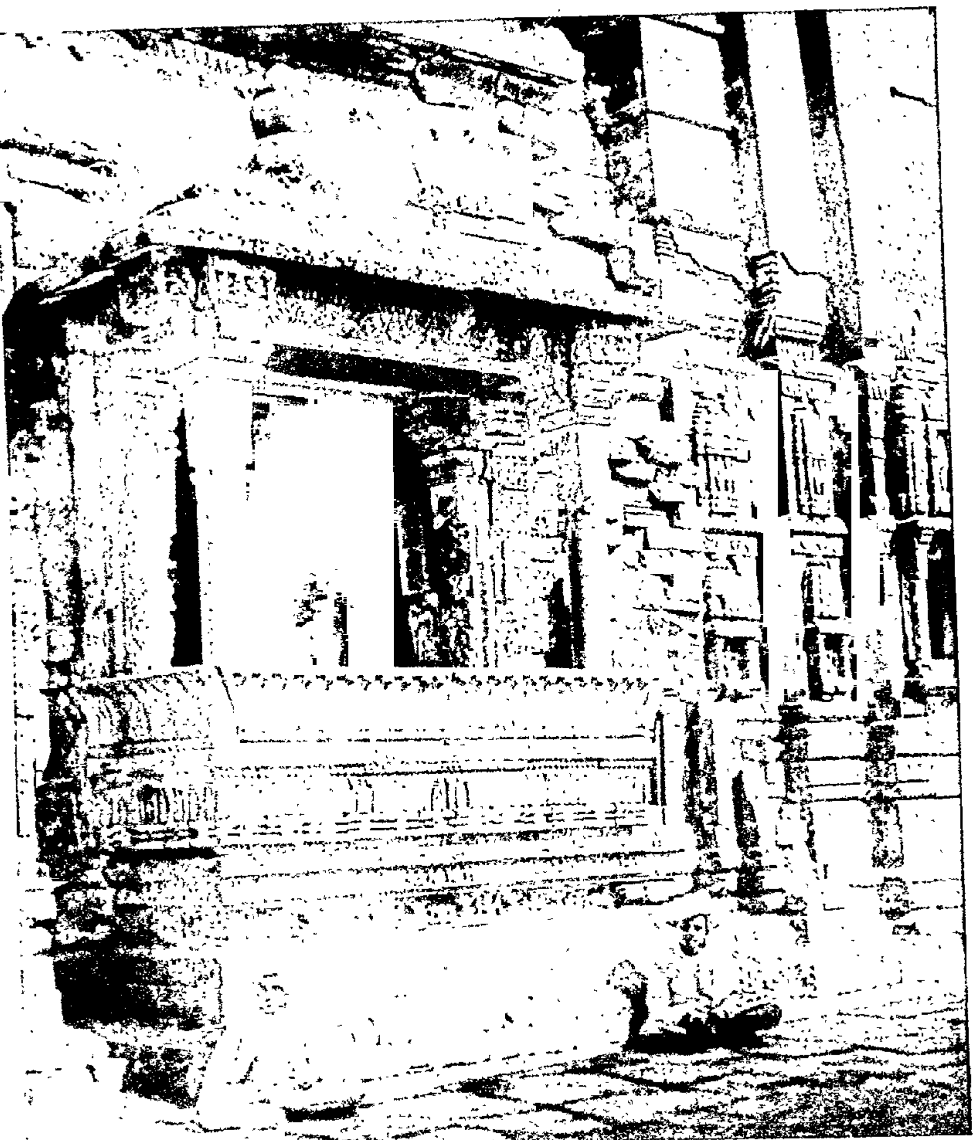
This conclusion fully agrees with that arrived at by Professor Kielhorn who has discussed the date from a chronological point of view. "If we were not restricted," that scholar remarks, "by the date of the second *praśasti* to any particular century of the Śaka era, I would say that the *laukika* year 80 of the first *praśasti* must correspond to Śaka 1126 expired, because, of all the expired 26th years of the centuries of the Śaka era from Śaka 626 to Śaka 1426, only the year 1126 yields the desired Sunday (the 2nd May A.D. 1204). And I should not be prevented by anything in the contents of the inscription and the language of the author, or in the alphabet employed, from assigning the inscription to so late a period.[1] To Professor Kielhorn's concluding remarks I may add that the series of Śāradā records which of late years has become available in Chambā State, fully confirm the view that the script of the Baijnāth *praśastis* represents not an early, but rather a late type of Śāradā." It is also interesting to note that Dr. Burgess, while assuming A.D. 804 to be the correct date of the Baijnāth *praśastis*, remarked that "if there were no such inscription to influence us, the archæologist might be disposed to assign the general structure to a somewhat later date."

We are now in a position to say with certainty that both the temple and the inscription are exactly four centuries later than was hitherto supposed—a conclusion of no slight consequence in the history of Indian architecture and palæography. Lovers of antiquity may feel disappointed at the above conclusion. It does not, however, affect the artistic merits of the building, which still retains an age of which only few temples extant in the Panjāb can boast. The question, how far the present building represents the original temple, can be better discussed after a brief description of it has been given. I may remark at once that there is no need now for assuming with Dr. Burgess that the Baijnāth temple had been destroyed by Maḥmūd of Ghazni in A.D. 1008 and was rebuilt soon after with part of the old material. The truth is that at the time when the Muhammedan conqueror invested Nagar-Kōṭ, the famous temple had not yet been called into existence.

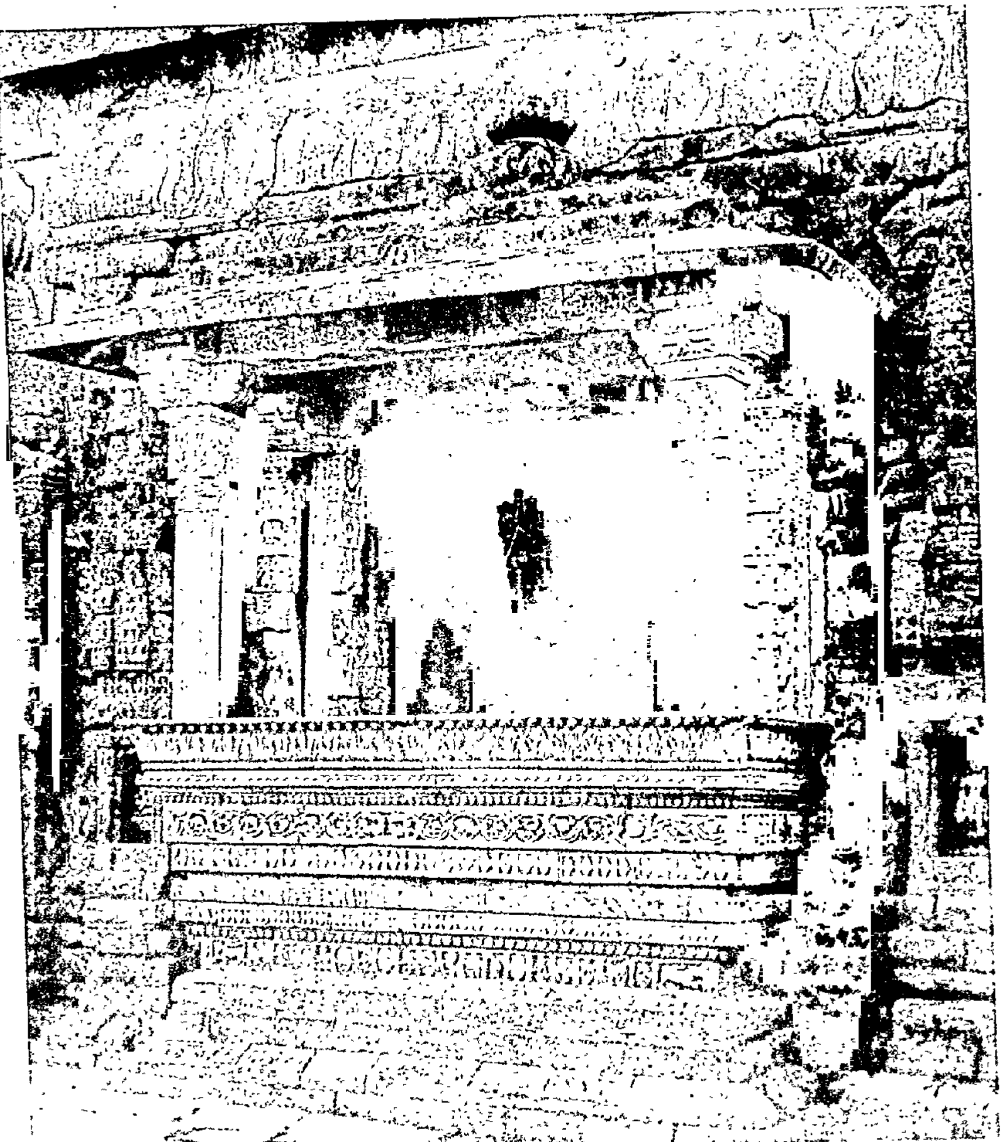
The Baijnāth temple is orientated due west. It consists of an adytum (*purī*), 8 feet square inside and 18 feet outside, surmounted by a spire (*śikhara*) of the usual conical shape, and of a front hall (*maṇḍapa*) 20 feet square inside covered with a low pyramid-shaped roof. The adytum which contains the *liṅga* known as Vaidyanātha is entered through a small anteroom with two pillars in antis. The roof of the *maṇḍapa* is supported by four massive pillars connected by raised benches which form, as it were, a passage leading up to the entrance of the sanctum. The architraves resting on these pillars divide the space of the ceiling into nine compartments, each of which is closed by means of corbelling slabs.

In front of the *maṇḍapa* rises a stately porch resting on four columns. "The shafts of these pillars," Fergusson remarks, "are plain cylinders, of very classical proportions, and the bases also show that they are only slightly removed from classical design. The square plinth, the two toruses, the cavetto, or hollow moulding between, are all classical, but partially hidden by Hindu ornamentation, of great

[1] F. Kielhorn: *A note on the Saptarshi era. Ind. Ant.*, Vol. XX (1891), p. 154.



SOUTHERN BALCONY.



NORTHERN BALCONY.

TEMPLE OF BAIJNATH, 1905.

elegance but unlike anything found afterwards." The capitals of the pot-and-foliage type are discussed by the same author at considerable length.

Both the south and north wall of the *maṇḍapa* are adorned with a graceful balcony window. The four corners are strengthened by means of massive buttress-like projections in the shape of half-engaged miniature *śikhara* temples, each containing two niches in which image slabs are placed. Smaller niches in slightly projecting chapels are found between the corner projections and the entrance and balcony windows.

The outer walls of the sanctum are enriched with three pillared niches enclosed in projecting chapels, each flanked by two niches of smaller size. The central niche in the east wall contains an image of the sun-god Sūrya wearing a laced jacket. It is placed on a marble pedestal which must have belonged to a figure of the Jina Mahāvīra, as appears from a Nāgarī inscription carved on its facets; which is dated in the Vikrama year 1296 Phālguna *ba. ti.* 5, Sunday, corresponding to 15th January A.D. 1240. Thus we find Śāradā and Nāgarī used side by side in Kāṅgṛā in the first half of the 13th century.


Fig. 4. Image of Kārttikeya.

In the central niche on the north side is placed an image (height 2′ 4″,) of the war-god Skanda or Kārttikeya seated on his vehicle the pea-cock. The god is represented with his usual six faces and with four arms, the one which held a lance being broken with part of that attribute. One of his right hands is apparently empty and rests against his thigh in the gift-bestowing attitude. The two remaining hands hold an ornamental wheel—the symbol of sovereignty—and a fruit, perhaps meant for a lemon.

It has generally been assumed that the Baijnāth temple has undergone a thorough restoration at the hands of Rājā Saṁsār Cand Kaṭōc, who ruled the Kāṅgṛā valley for nearly half a century (A.D. 1776—1824) and whose ambition in re-asserting the ancient claims of Trigarta over the surrounding hill states led to a collision with Ranjit Singh and to the final ruin of the Kaṭōc kingdom. That the temple was repaired by Saṁsār Cand or rather by his family priest (*purohit*) Gaṅgā Rām, appears, according to Cunningham, from an inscription let into the pavement of the courtyard

of the temple, which he reads[1] *Saṁvat 1843 Jeṭh praviṣṭe 15 Śri Rājā Saṁsār Cand purohit Gaṅgā Rām ke hukam māphak*, (i.e., *muwāfiq*) *Batehare Jite ne ghaḍī.*

"In the year 1843 (A.D. 1786) on the 15th day of Jeṭh the mason Jit engraved this according to the order of Gaṅgā Rām, the family priest of Rājā Saṁsār Cand."

It is interesting to note that this inscription is dated in the same year in which Saṁsār Cand occupied Kōṭ Kāṅgṛā, which for more than two centuries had been in the hands of the Muhammedans. But little more than a score of years the Kaṭōc Rājā enjoyed the possession of his ancestral stronghold. Pressed by the Gurkhas, he was compelled to surrender it to Ranjit Singh in 1809.

It must, however, be admitted that the quoted inscription—if at all a record of the so-called restoration—is by no means clear as to its details. Cunningham, mainly—so it seems—relying on local tradition, maintains that Saṁsār Cand made some extensive repairs, and at the same time added the present entrance porch and the two large side balconies. "These," Cunningham says, "had previously existed, but had fallen down and disappeared. I think it probable that the porch may be not unlike the original; but I have a very strong suspicion that the restorer did not adhere too strictly to the style of the original side niches, as their mouldings differ very much from those of the old basement of the main body of the building."

Fergusson, whose account is based on Cunningham's, says: "In 1786 the large temple underwent a thorough repair at the hands of a Raja Sinsarchand (*sic*) which has obliterated many of its features; but it is easy to see at a glance what was done in the beginning of the 9th (*read* 13th) century and what 1000 (*read* 600) years afterwards." The pillars of the porch, according to the same authority, "retain their forms up to their capitals at least. The architraves belong to the repair in 1786."

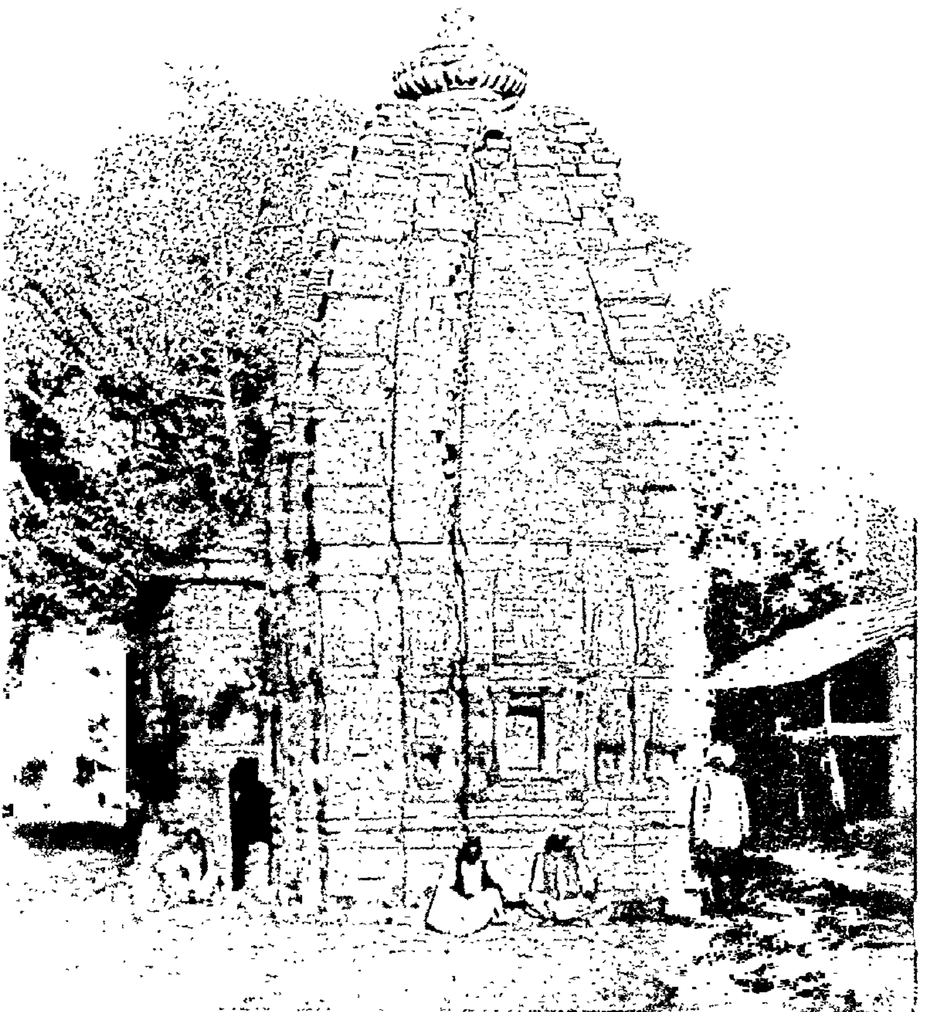
Dr. Burgess is of opinion that the pillars of the porch are of an early date, but that the porch in it's present form is probably due to Saṁsār Cand. "With the exception of the balcony windows on each side of the *maṇḍapa*, its walls and inner roof and those of the shrine were not materially interfered with, but the outer roof of the *maṇḍapa* and the spire of the shrine were either largely reconstructed or covered with so thick a coating of lime, as entirely to mask the original."

Dr. Stein, on the contrary, who had the advantage of personally inspecting the temple in December 1892, expressed the opinion that the temple, "has not undergone such very great alterations as the earlier describers state." He points out that the doorway jambs of the adytum are still decorated with the images of the river goddesses Gaṅgā and Yamunā, mentioned by the author of the inscription (I,29) and that "his other detailed statements regarding the building fully agree with the actualities." "Only the roof" Dr. Stein remarks "seems to me modern; according to the statements of the Purohitas it was renovated about one hundred years ago by Rājā Saṁsār Cand."[2]

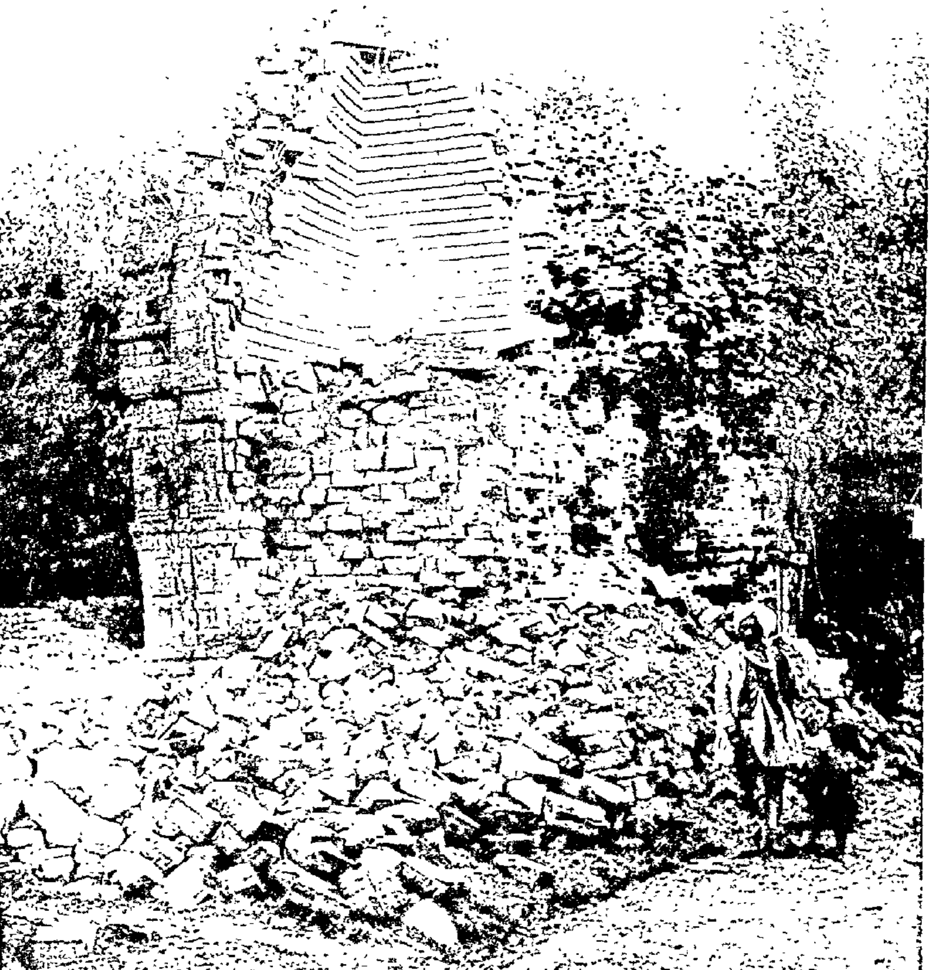
I believe Dr. Stein's remarks to be correct. All authorities agree that the body of both sanctum and *maṇḍapa* is original, but what reason is there to assume that the porch and balcony windows were added in the year 1786? To any one slightly acquainted with the architectural monstrosities of the Sikh period there cannot be the shadow of a doubt that neither this noble porch with its stately pillars, praised by

[1] I have slightly altered Cunningham's transcript and the wording of his version.

[2] *Cf.* Bühler: *An additional note on the Baijnāth Praśastis.* *Epigr. Ind.*, Vol. II, *p.* 483.



1901.



1905.

TEMPLE OF SIDHNATH (BACK),

Fergusson for their classical proportions, nor the tastefully decorated balconies were wrought in those days of utter decay. (See Plates V and VI.) I do not deny the possibility of their having been added to the building at a date not far removed from its foundation. The difference in ornamentation of the two balconies is certainly remarkable. But there seems to exist not the least necessity for denoting them as modern. Both the porch and balconies are in such perfect harmony with the rest of the building that, if an addition, they are at any rate an embellishment.

Fergusson, at least, admitted the pillars of the porch up to their capitals to be ancient. The reason why he believed the architraves to be modern is obvious. He mistook for carvings—and such they appear on his woodcut—what in reality are only figures and ornaments executed in plaster. The same author recognised that the modern appearance of the *śikhara* might merely be due to its being covered with a thick layer of lime. Such is undoubtedly the case. The earthquake has had the beneficial effect of shaking down some of this modern work, and the old stonework has in places become exposed. It shows, as Fergusson rightly surmised, the same decoration as the temple of Jamadagni. It seems indeed that the extensive repairs by Saṁsār Cand II may be reduced to that coat of plaster under which we still possess the original building just as it was built by the two pious merchants in the year 1204.

It is a matter of surprise that the Baijnāth temple, situated at no great distance from the centre of the earthquake, has escaped destruction. The body of the building has practically suffered no damage except some slight cracks. The buttress-like projections on the four corners of the *maṇḍapa*, except that on the north-west, are considerably damaged and will have to be rebuilt. (See fig. 5.) The sculptured stones facing the jambs of the balcony windows are partially displaced as will be seen from the accompanying plate. Inside, three of the architraves resting on the four pillars of the *maṇḍapa* are broken. It is said that they were cracked before the earthquake, which accounts for iron bars having been used to strengthen them. At my recommendation they have been provisionally propped up. In a report submitted to the Panjāb



Fig. 5. Temple of Baijnāth, south-east.

Government in January 1906, I have set forth the measures required for the preservation of the Baijnāth temple, but at the end of the year under review no action had yet been taken. It is earnestly hoped that the more urgent claims of works of general utility will not cause the neglect of those few ancient monuments which the earthquake has left standing.

The Baijnāth temple stands in the middle of an enclosure of irregular shape, about 120′ in length and from 60′ to 75′ in width. This temple yard contains a number of minor buildings which have all more or less suffered from the action of the earthquake. Only two of these deserve special notice: the pavilion over the bull Nandi in front of the temple and the shrine of Jamadagni. The Nandi pavilion —a canopy supported by four pillars—has been thrown down, but can be rebuilt at a trifling cost, the old materials being still extant. The Jamadagni shrine was mistaken by Fergusson for the Sidhnāth temple which will be noted presently. "It has," that author remarks, "all the features of a very old temple—great simplicity of outline, no repetitions of itself, and the whole surface of the upper part covered with that peculiar horse-shoe diaper which was so fashionable in those early days. The *amalaka* string courses are subdued and in good taste, and the crowning ornament well proportioned." The earthquake has caused the roof of this building completely to collapse. It will be seen from Fergusson's woodcut that it was in a ruinous condition for at least thirty years back.

The remaining buildings in the temple yard are all comparatively modern and devoid of archæological interest. The temple of Murlimanohar or Rādhā Kṛṣṇa is ascribed to Paṇḍit Gaṅgā Rām, the family priest of Rājā Saṁsār Cand, whose name occurs on the inscribed stone let in the pavement[1]. Its porch has come down, but could be rebuilt at no great expense. The temples of Narmadeśvara, Bhairava, Lakṣmī-Nārayaṇa and Jagannātha and a *Satī* memorial, known by the name of *dēhrī*, are only slightly damaged. The *liṅga* shrine of Nīlakaṇṭha has completely collapsed. The buildings, enclosing the courtyard, which were used for store-rooms, hospices for travellers and dwellings for the priests attached to the temple have all been ruined in the earthquake, but none of them can be said to be of any architectural importance. Finally I may mention that among the débris of these buildings a fragment of an inscribed stone was found which originally may have been the lintel of some temple. It contains four lines of Śāradā writing, unfortunately much obliterated. The stone has been deposited in the Lahore Museum.

"The smaller temple of Siddhnāth," Cunningham says, "is similar in its arrangement both inside and outside to that of Baijnāth. But it faces towards the east, and the side openings of the *maṇḍapa* are without pillars, and are closed by stone trellises. It differs also in having two small doorways in the back-wall of the *maṇḍapa* leading past the outer wall of the sanctum. In the interior the roof is similarly supported on four pillars, and the ceiling is formed in the same way by overlapping slabs. Exteriorly the walls and roofs are ornamented after the manner of the Baijnāth temple."

Dr. Burgess has rightly pointed out that the plan and elevation of the Sidhnāth temple published by Cunningham are far from accurate. Mr. Rodgers' care in having

[1] See above, p. 21.

more reliable drawings prepared will be the more appreciated, since the building itself has practically ceased to exist. In the year 1903, proposals for its preservation were under consideration but, as these would have involved a wholesale rebuilding of the temple, the matter was allowed to be dropped. The catastrophe of the 4th April has completed the collapse of the edifice. The east wall of the *maṇḍapa* as well as the south and west walls of the shrine proper, together with half the spire, have been thrown down, and the temple is now nothing but a ruin surrounded on all sides by débris. (See Plate VII.) The sanctum, however, has remained intact inside, including its ceiling, and is still used for worship. At present, restoration of the building to its prior state is out of the question, but such minor measures have been proposed as will tend to preserve it in its present condition.

Besides the monuments noted, there are in the Kāṅgṛā valley some of secondary importance which have been slightly damaged in the earthquake Among them I wish only to mention the temple of Ambikeśvara at Haripur, profusely decorated with carvings and believed to be the oldest shrine of that place ; the well-known sanctuary of Jvālā-mukhī, "the flame-mouthed goddess," more renowned as a place of pilgrimage than for its architectural merits ; a richly sculptured masonry tank or *naun* at Javāli, and the Ṭhākur-dvārā of Fatḥpur (Fatehpur) adorned with frescoes relating to the legend of Kṛṣṇa and ascribed to Rājā Mandhātā of Nūrpur (A. D. 1667-1700). It does not appear that in the Kuḷū valley any losses to archæology are to be deplored. Here most temples are largely built of wood, and on that account have withstood the shock more effectually. I have, however, had no opportunity to visit Kuḷū personally since the earthquake, and no returns have been supplied to my office for this part of the district. The ancient temple of Śiva Viśveśvara at Bajaurā with its remarkable sculptures seems to have received no serious damage, though the state of the building gave every reason for apprehension.

Outside the Kāṅgṛā district the only cases of serious injury to Hindū monuments occurred in the upper Rāvī valley (Chambā State), separated from Kāṅgṛā by the Dhaulā Dhār on the southern slope of which Dharmsālā is situated. The most serious case of this kind is the Narsiṅgh temple at Brahmaur, a stone *śikhara* shrine, the foundation of which by Rāṇī Tribhuvana-rekhā is mentioned in the oldest copper-plate inscription of Chambā.[1] The upper portion of the structure is entirely displaced and the masonry shows considerable cracks. There is no reason to anticipate the immediate collapse of the building, but there can be little doubt that the injury received will lead to further deterioration. To save the edifice, it will either have to be rebuilt or to be filled solid inside with rubble stone, mortar and cement. In the latter case it would become unfit for religious worship. The course first mentioned seems therefore the more recommendable. The matter has been reported to His Highness the Rājā of Chambā. The other stone temple of Brahmaur dedicated to Śiva, and the Devī temples at that place and at Chatrāṛhī have received no serious damage. The numerous shrines of Chambā town have not suffered. Those in the Chandrabhāgā valley, still further removed from the centre of the catastrophe, are reported to be intact.

J. PH. VOGEL.

[1] *Cf.* A. S. R. for 1902-03, p. 248 *ff*.

Postscript.

Regarding the ancient temples in the Kuḷū valley, I am now in a position to add some particulars based on information received from Mr. G. C. L. Howell, C.S., Assistant Commissioner of the Subdivision. It appears that here also the stone temples have felt the effects of the shock most severely, whereas the hill shrines which are largely built of wood have escaped almost without injury.

Among the latter the famous temple of Hiḍimbā or Hiṛmā Devī at Ḍhungrī near Manālī takes a prominent place. It was built by Bahādur Siṅgh in A.D. 1553. This shrine with its high conical roof and quaint wood-carvings was once the chief sanctuary of the valley, the goddess to whom it is dedicated—the man-eating Hiḍimbā—being regarded as the patroness of Kuḷū. It is gratifying that this remarkable building was but slightly damaged in the earthquake and has since been repaired.

The temple of the goddess Tripura-sundarī at Nagar, the ancient capital, similar in style to that of her sister Hiḍimbā but devoid of wood-carved decoration, received likewise slight damage and has been repaired. The third temple of this type, that of Triyug Nārāyaṇ at Dyār on the left bank of the Biās opposite Bajaurā, is reported to have been damaged, but was repaired out of temple funds and subscriptions.

Two other important Devī temples are still to be mentioned. That of Sandhyā Devī, the goddess of Dawn, at Jagatsukh in the upper valley, appears to have been built by Rājā Urdhan Pāl, one of the last princes of the Pāl dynasty. He must have ruled about A.D. 1500. The shrine of Ambikā Devī at Nirmaṇḍ on the Satluj is best known to archæologists on account of the ancient copper-plate it contains. Both these temples have withstood the earthquake without injury.

Whereas, therefore, these ancient hill shrines, dedicated, all but one, to different forms of Devī, have proved the fitness of their construction in a country subject to earthquakes, some loss is to be recorded among the stone-built temples of the *śikhara* type. The latter—it should be noted—are, in general, of a later date and were mostly founded about the middle of the seventeenth century when Rājā Jagat Siṅgh made Vishṇuism the State religion of Kuḷū.

The temple of Raghunāth at Sultānpur, founded by the same ruler, is reported to have collapsed in the earthquake. The Rāī of Rūpī and Rāī Hīrā Singh of Shangri, both descendants of the ancient Rājās of Kuḷū, headed a subscription of Rs. 3,800 which has been expended on repairs. Another Rs. 4,000 will be required to complete the work. The temple, though now the principal sanctuary of the valley, was of no archæological interest.

The spired temple of Murlidhar (Krishṇa) at Ṭhānā near Nagar, the ancient capital of Kuḷū, shared the fate of the Raghunāth temple of Sultānpur. It is being repaired under the supervision of the Rāi of Rūpī out of temple funds which, however, appear to be inadequate for the purpose. The temple possesses a copper-plate dated Saṁvat 56 (A.D. 1780) in the reign of Prītam Siṅgh.

The two *śikhara* temples of Rāmchandar and Raghunāth at Maṇikarṇ, the famous place of pilgrimage in the Pārbatī valley, were both slightly damaged, but have been repaired.

Finally, I must mention the spired stone temple of Basheshar (Viśveśvara) at Hāṭ near Bajaurā. It is the oldest temple of its kind in the valley and profusely decorated with carvings. On both sides of the entrance are images of the river goddesses Gaṅgā and Yamunā, whilst the three outer niches contain slabs carved with the effigies of Gaṇeśa, Vishṇu, and Durgā. The temple is now in a very precarious state and is sure to collapse within a few years, unless it is thoroughly repaired. The cost of preservation is roughly estimated at Rs. 5,000.

J. PH. V.

SOME CONSERVATION WORKS IN THE NORTHERN CIRCLE DURING 1905-06.

Restoration of the minarets on the south gateway of Akbar's tomb at Sikandarah.

ONE of Lord Curzon's last orders regarding Archæological works in these provinces was that the missing *chhatris* should be restored on the four minarets on the south gateway of the tomb of Akbar at Sikandarah. Various explanations have been put forward to account for the truncated appearance of these minarets with which visitors to Agra have long been familiar. One theory is that the *chhatris* never existed, and that the building of the minarets was never completed; but this can hardly be accepted in view of the inscription on the gateway, which records that the south gateway, along with the main building, was 'finished' in the seventh year of Jahāngīr's reign. In his memoirs,[1] the Emperor Jahāngīr refers to the gateway as having been adorned with four minarets; and there is nothing in contemporary authors to show that they were left incomplete by the builders. Another common story is that the tops were dismantled by order of Lord Lake in 1803, because some soldiers fell from the *chhatris*; but as Mr. Keene[2] points out, this is impossible, since Mr. Hughes, an artist who saw them in 1782-83, observed that the *chhatris* had, even then, been long since destroyed. The truth probably is that the *chhatris* were destroyed by the Jāts[3] when they sacked Agra in 1764.

A remarkable feature in the minarets is the irregular jointing of the marble face-work. It is hardly conceivable that this is an original feature, since the Mug͟hals usually erred on the side of excess in making their masonry neat and tidy. It is more likely that it is due to an effort on the part of some restorer to rebuild what the Jāts had destroyed. Captain Taylor was engaged in restorations at Sikandarah in 1815,[4] but we do not know exactly what he did. The tablet on his grave in the Agra cantonment cemetery mentions that both Sikandarah and the Tāj were "repaired and restored" to beauty by him. Again, in 1824, Bishop Heber remarked that Government had granted funds for repairs at Sikandarah, and that an officer

[1] *Tuzuk-i-Jahāngīrī.*

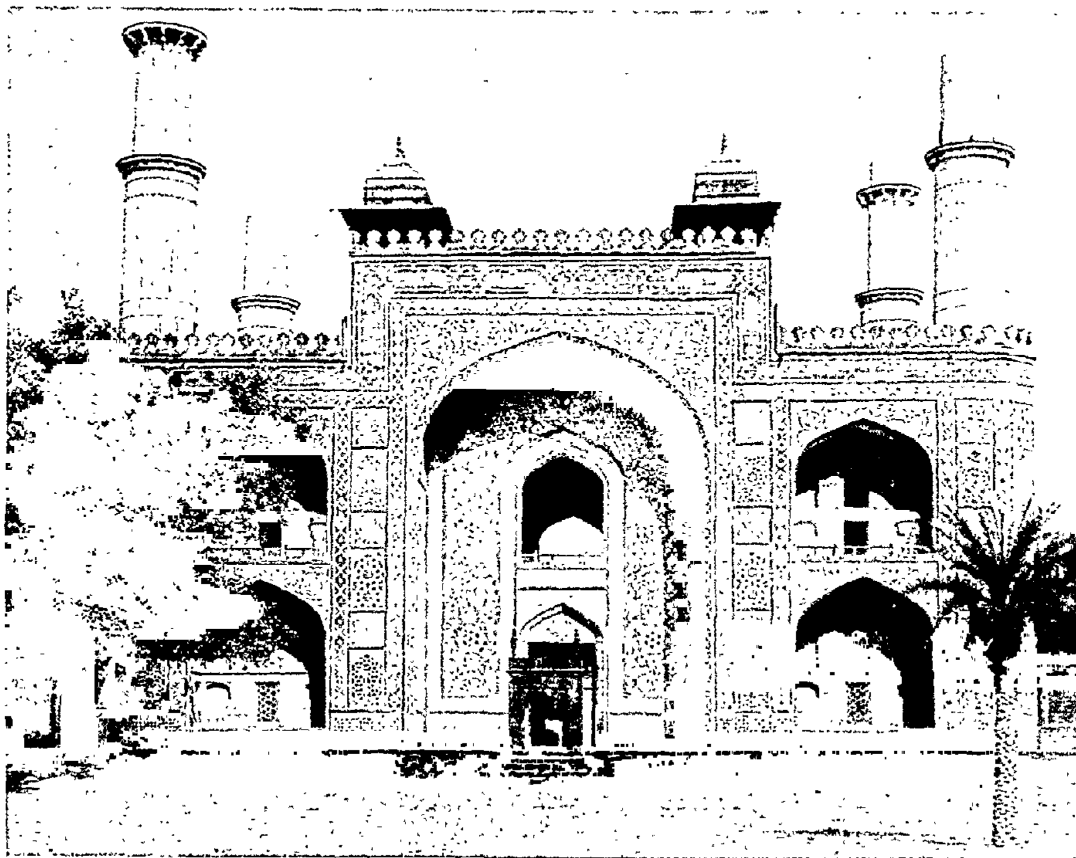
[2] *Handbook for visitors to Agra*, H. G. Keene, p. 47.

[3] *Agra, historical and descriptive.* S. M. Latif, p. 172.

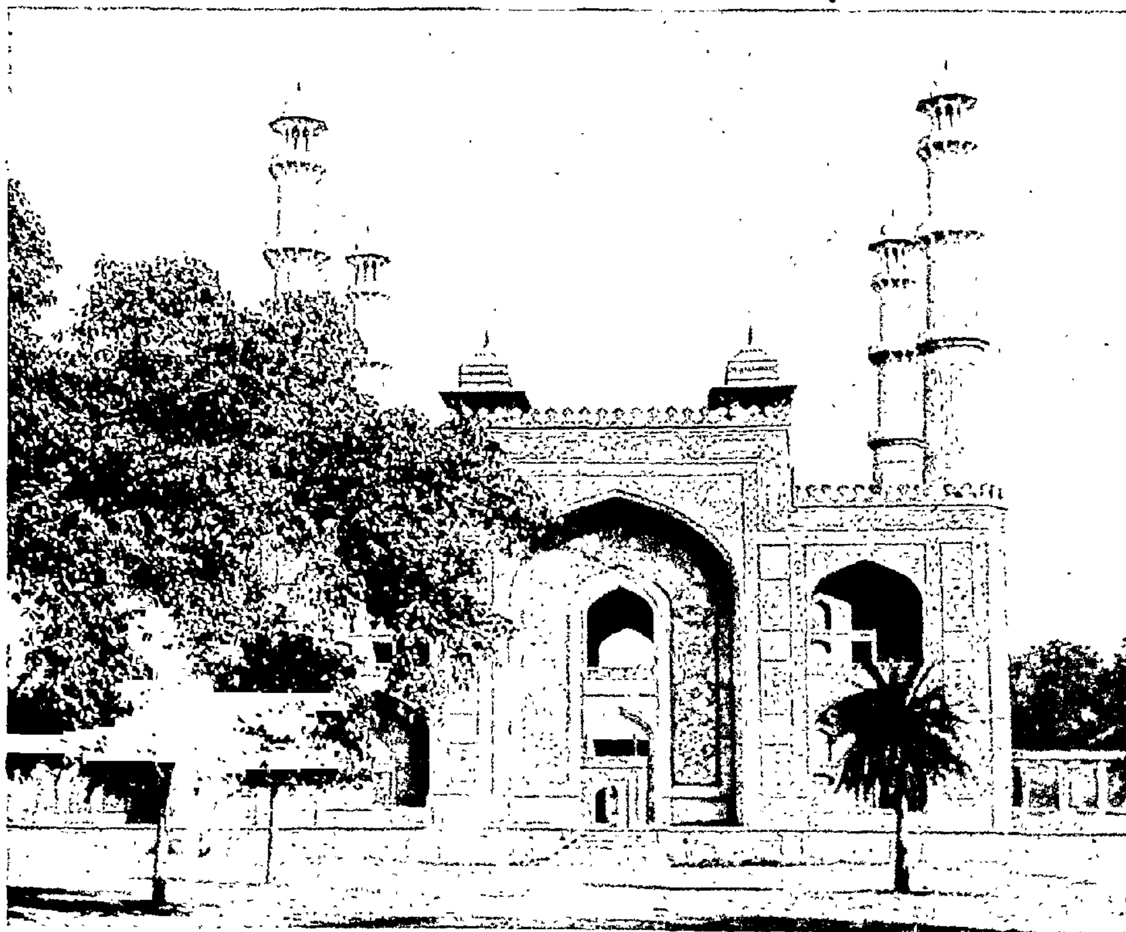
[4] *First report of the Curator of ancient monuments in India*, Simla, 1882, Chap. I, p. 4.

AGRA: SIKANDARAH.

a.



b.



a. THE SOUTH GATEWAY IN 1905, BEFORE RESTORATION OF THE MINARETS.
b. THE SAME AFTER RESTORATION.

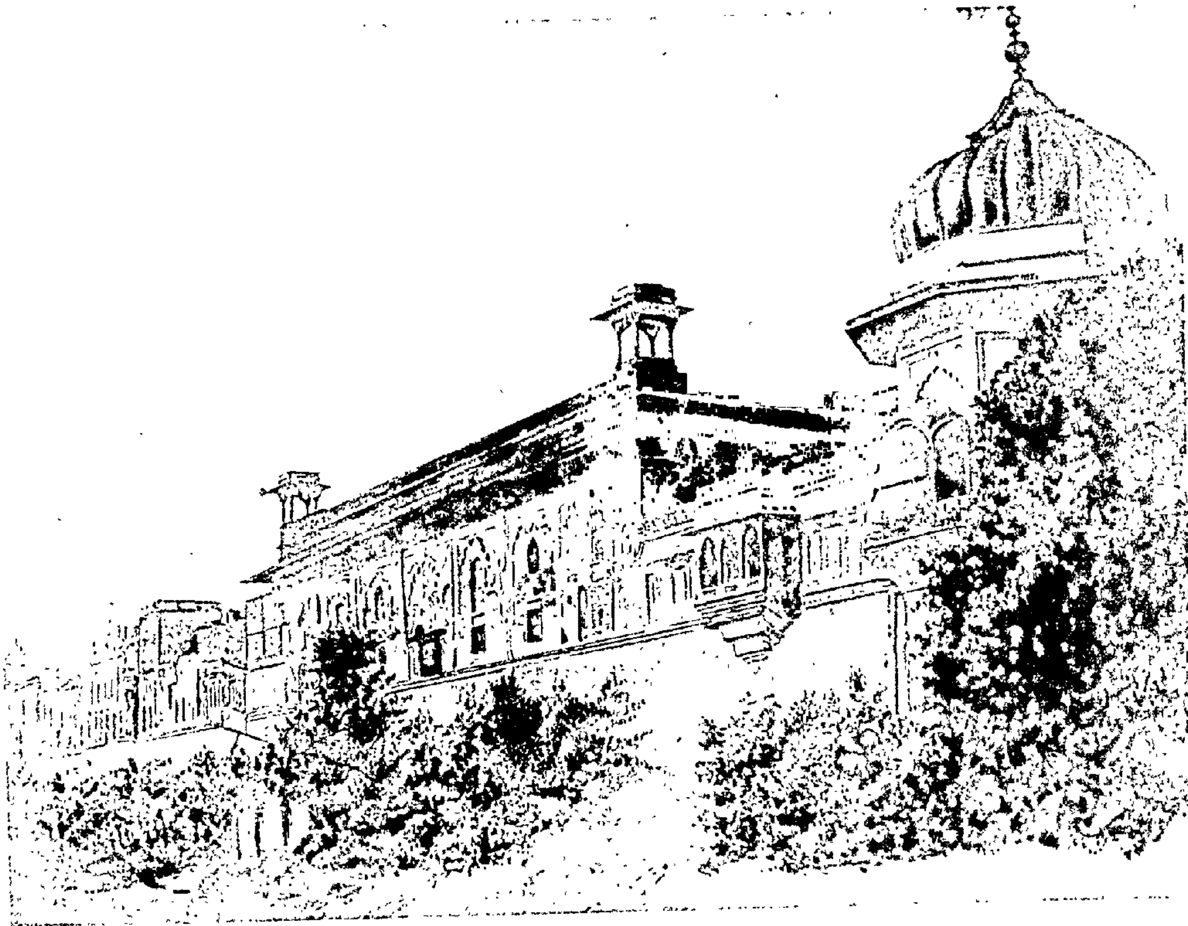
[illegible] ON THE SOUTH GATEWAY.

[illegible] ORIGINAL PHOTOGRAPH TAKEN BY [illegible] IN 1881, BEFORE REPAIR.

b. AS RESTORED IN 1806.

PLATE IX.

DELHI FORT.



a. CIRCA 1857.



b. PRESENT DAY.

THE RIVER FRONT, FROM THE MUTHAMMAM BURJ TO THE MUMTAZ MAHAL

of the engineers was then employed upon the work.[1] At all events the irregular jointing was there before Mr. Heath commenced his operations in 1881. Mr. Heath took photographs of the minarets before and after his operations, which consisted in dismantling and rebuilding the minarets stone for stone as he found them. From these photographs it is clear that Mr. Heath carried out his work with consummate care and accuracy. He rebuilt the minarets with practically no alteration at all in their external appearance but he made the cores and staircases thoroughly sound, and clamped the courses together with galvanised iron clamps.

When the restoration of the *chhatris* was being considered last year, it was questioned whether the lower stages of the minarets should not be rebuilt in regular courses, which would have been more in accordance with Mug͟hal ideas. Owing, however, to the wish expressed by Lord Curzon that the *chhatris* should be finished before the approaching visit of H. R. H. the Prince of Wales, it was decided not to interfere with the irregular jointing in the lower stages. As it turned out, it was only by continuing the work night and day that the Executive Engineer and his staff succeeded in finishing it within the prescribed time.

In the preparation of the detail drawings for the reconstruction little or no difficulty was experienced, as there was not only the invaluable record left by the Daniell brothers to serve as a trustworthy guide, but where this record failed, the indications given by the surviving remains themselves and the practically unchangeable laws which governed the construction of Mug͟hal buildings in Jahāngīr's reign left no room for doubt as to what the original had been. While this work was in progress the opportunity was taken of restoring in marble the upper members of the projecting cornices at the different stages of the minarets, which had been restored at some time previous to 1881 with red sandstone. The marble was for the most part quarried at Makrana, the remainder being taken from the blocks which had been lately unearthed in the courtyard of the Dīwān-i-'Āmm in Agra Fort.

Some old photographs of Delhi Fort.

Plates X, XI, XII and XIII are reproductions from some old photographs recently purchased from a native dealer in Delhi, side by side with new photographs taken from the same points of view. The old photographs were apparently taken very shortly after the mutiny in 1857. The most interesting of them is perhaps Plate X, which shows a long line of buildings on the east, or river front, of Delhi Fort, many of which were dismantled after the British occupation. The domed building on the right is the Mut͟hamman Burj, the building from which Captain Douglas addressed the mutineers on the morning of 11th May 1857.[2] It will be noticed that the cupola on the Mut͟hamman Burj was formerly of gilded metal, and of a different shape from the plaster cupola which was afterwards restored. Between the Mut͟hamman Burj and the Rang Maḥall, which is the large building in the centre of the plate, the old photograph shows a high *pardah* screen. It was known that a *pardah* screen existed in this position—indeed its exact height is given by the marks on the south face of the

[1] *Narrative of a journey through the upper provinces of India*: R. Heber, London. John Murray, 1861, Vol. II, p. 8.

[2] *Delhi Past and Present*. H. C. Fanshawe, London, John Murray, 1902, page 38.

Muthamman Burj, where the end of the screen abutted against the wall. The parapet and wooden railing on the top of the screen in the photograph seem to indicate that there was a flat roof over the court between the Muthamman Burj and the Rang Mahall, but it is most improbable that any such parapet or roof formed part of the original design. This parapet does not figure in an old water-colour drawing which will be referred to below.

The exterior of the Rang Mahall remains practically unchanged, except for some hoods of sheet iron, which were subsequently fixed over the windows to screen them.

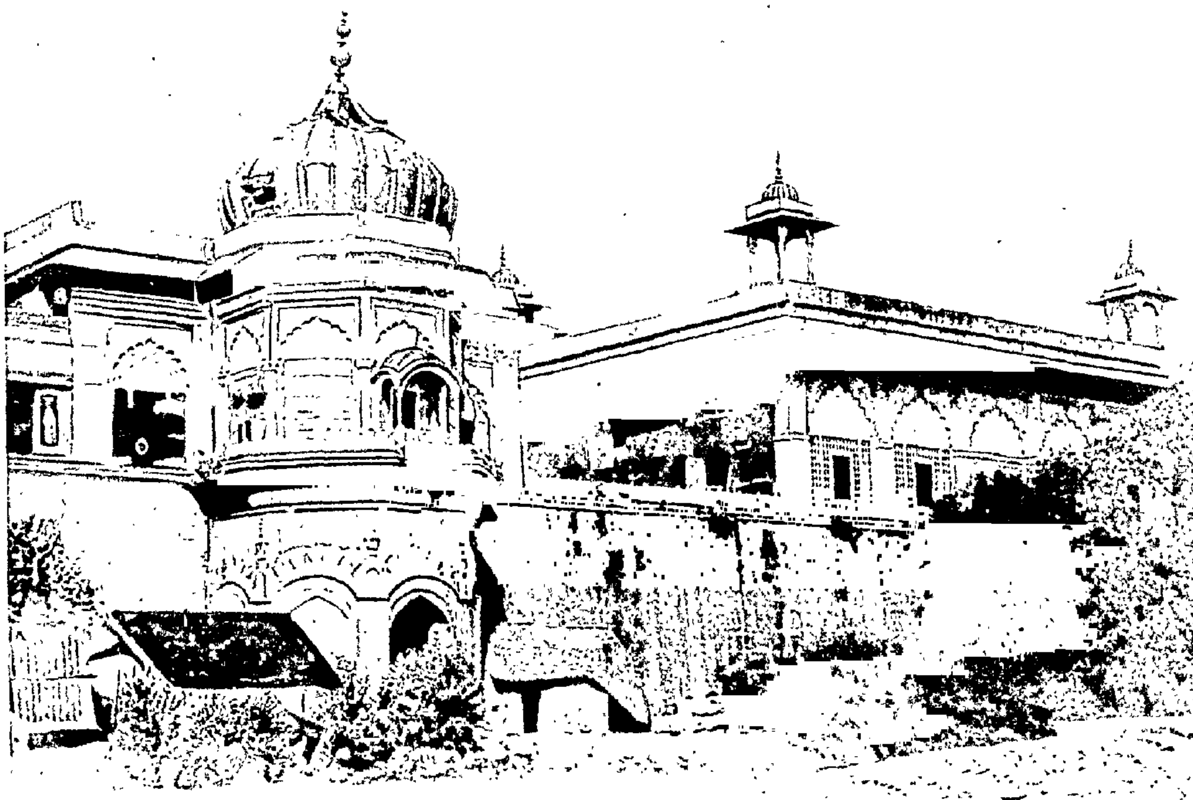
On the south side of the Rang Mahall, between it and the Mumtaz Mahall, the photograph shows a curious medley of Classic, Saracenic and Gothic architecture, all unhappily destroyed after 1857. The Gothic building with the pinnacles and bird surmounting the pediment, is particularly interesting, because it is, so far as I know, the earliest building of that style in these provinces, of which we have any record. It is very doubtful whether these exotic buildings were erected by Shāh Jahān. They were probably built after Aurangzeb's reign; otherwise Bernier, writing in 1663, would hardly have said "the edifices in the Fort have nothing European in their structure."[1] Probably these were the apartments of the later kings' wives, which Von Orlich in 1843 describes as being, together with those of the king, "along the river to the south of the Dewan Khas." The king's private residence was, according to Von Orlich, the Muthamman Burj and Tasbīḥ Khānah. His description is worth quoting:—"Before the entrance to the residence of the Great Mogul a pair of scales are suspended over a stone seat, to indicate that justice alone is administered in these apartments. As we entered the halls which lead to the king's apartments we saw a rhapsodist, who was sitting before the bedchamber of the Great Mogul,[2] and relating tales in a loud voice. A simple curtain was hung between him and the King, who was lying on a couch, and whom these tales were to lull to sleep. We descended by a flight of steps into the garden, which lies on the banks of the Jumna and is adorned by every variety of flowers, and some large tamarind and banyan trees; doves also are kept here for the special amusement of the aged king, who enjoys the pleasure of an excursion on the Jumna (which is here 900 feet in breadth) every morning and evening."[3]

At the time when this photograph was taken, the garden to which Von Orlich refers had gone to rack and ruin, but a very good water-colour illustration of it, dating possibly from the time of Shāh Jahān, was lately acquired by the Director General of Archæology. This picture also shows the screen between the Muthamman Burj and the Rang Mahall without any parapet or balustrade on the top of it, and some gilded metal cupolas on the *chhatris* of the Rang Mahall. The entrance to the garden was down some steps in the Muthamman Burj and through the doorway at the bottom, which appears on the right hand side of the photograph.

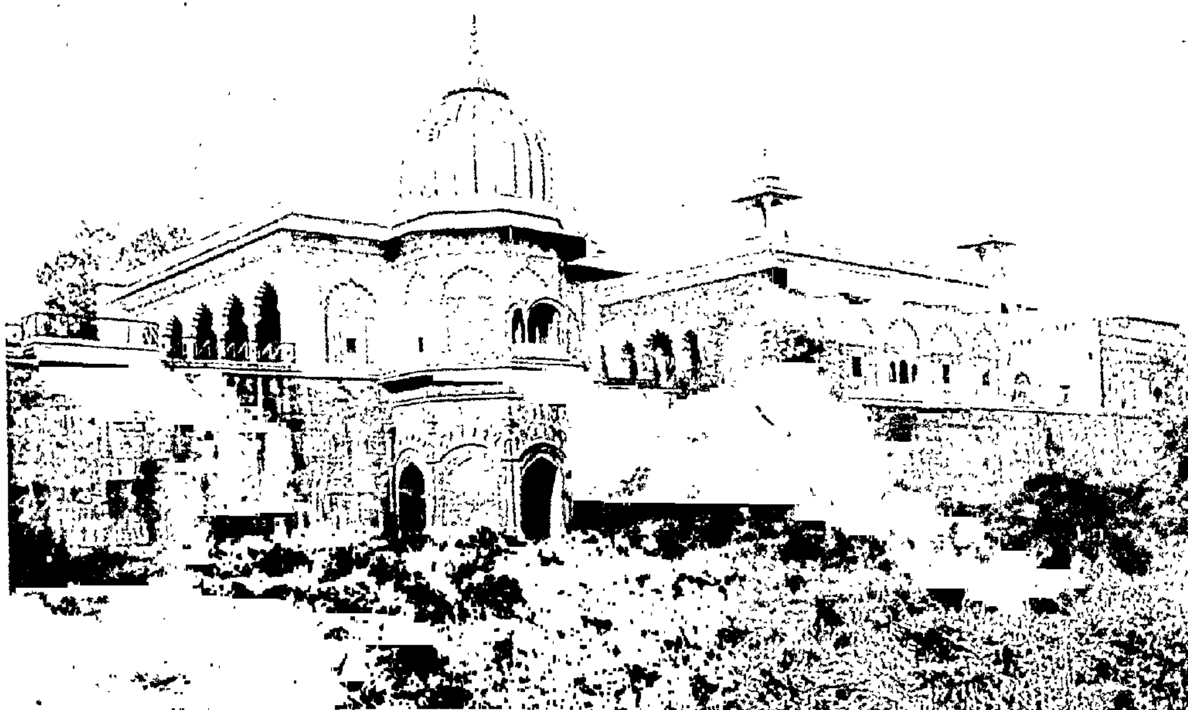
It will be observed that the Jumna, which has since changed its course, was still flowing close in front of the east wall of the fort in 1843. It was on the banks of

[1] *Travels in the Mogul Empire.* Bernier, Constable's edition, page 256.
[2] Bahādur Shāh, the last king of Delhi.
[3] Von Orlich, *Travels in India*, London, Longman & Co., 1845. Vol. II, page 25.

DELHI FORT: THE RIVER FRONT SHOWING MUTHAMMAM BURJ AND DIWAN-I-KHASS.



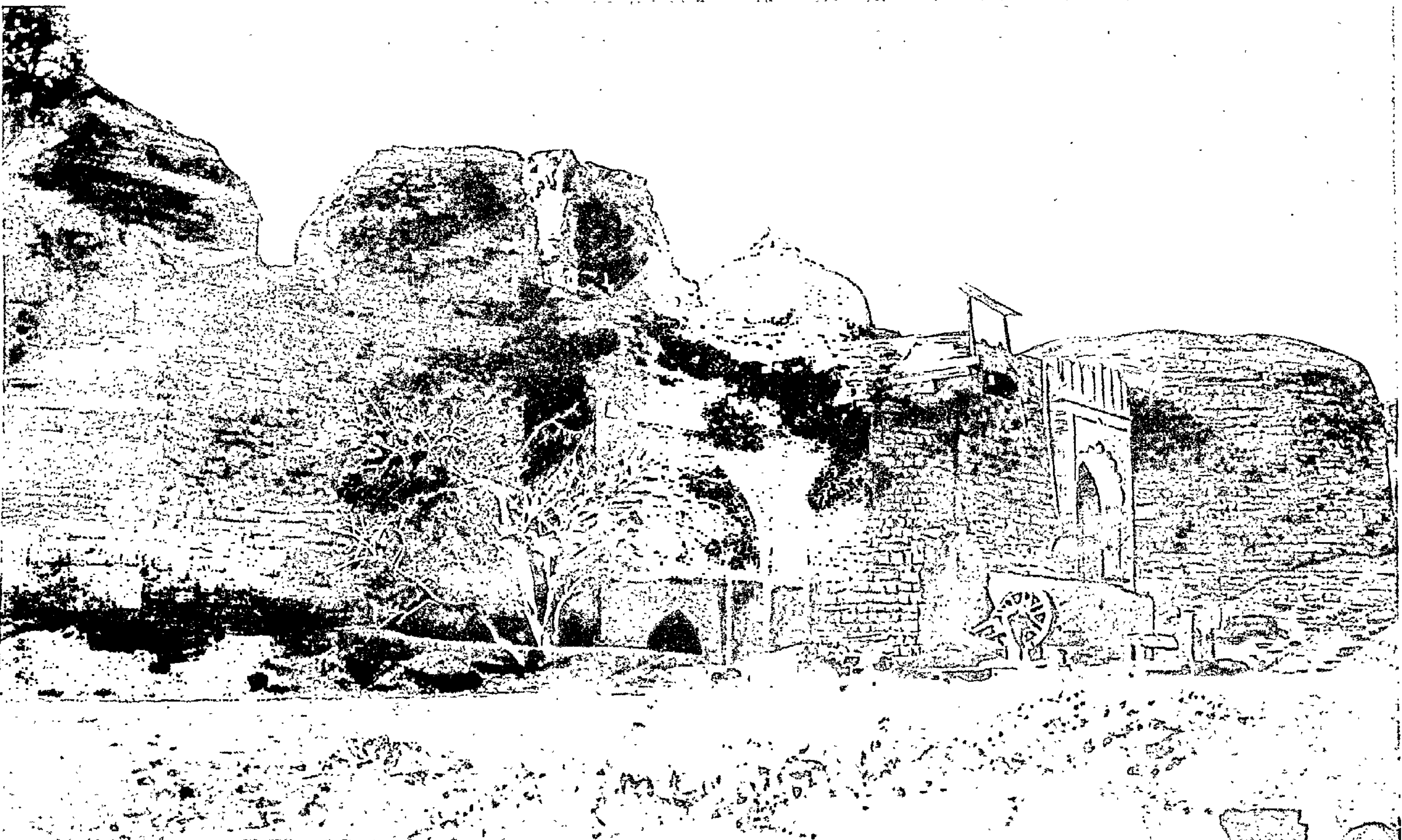
a. CIRC., 1857.



b. PRESENT DAY.

PLATE XII.

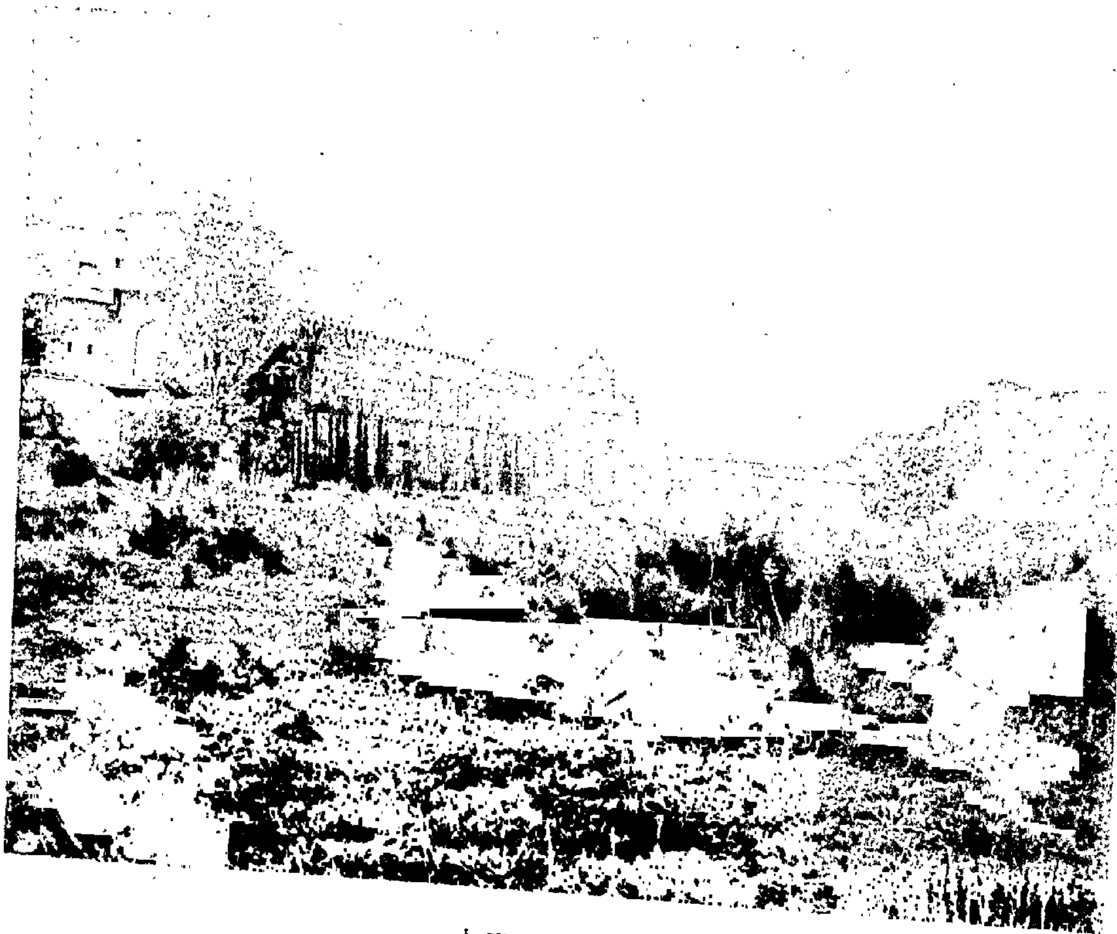
DELHI: THE NORTH-WEST CORNER OF THE SALIMGARH, CIRC. 1857.



DELHI FORT: THE CHANNEL BETWEEN THE FORT AND SALIMGARH.



a. CIRC., 1857.



b. PRESENT DAY.

the Jumna, in front of the fort wall, that elephant fights and reviews of troops were witnessed by Aurangzeb.[1] The next photograph, Plate XI, shows the Muthamman Burj on the left and the Dīwān-i-Khāṣṣ on the right. It seems to be taken at a slightly later date than the other, as the large tree shown on the right of the Muthammam Burj in the latter had disappeared, and a lamp of British appearance had been fixed in the entrance at the bottom of the Muthamman Burj. The battered condition of the cupola on the Muthamman Burj was no doubt due to the shots fired during the mutiny. This photograph gives an excellent view of the balustrade between the Muthamman Burj and the Dīwān-i-Khāṣṣ, which was evidently a solid balustrade of white marble. It also shows the old metal-gilded cupolas on the Dīwān-i-Khāṣṣ, which were restored some years ago in marble.

Plate XII illustrates the north-west corner of the Salīmgaṛh, outside Delhi Fort, in the days before the moat was filled up by the present road. The dome of the mosque in the back ground is still standing, though it is nearly concealed by trees. The well shown in the old photograph and the projecting staging above it are no longer in existence.

Plate XIII gives an excellent view of the old bridge which is said to have been built by Jahāngīr to connect the Salīmgaṛh with the road to the city. Most of the bastions of the Salīmgaṛh, which figure in this photograph, have since disappeared, together with the bridge, and three modern bridges now cross the channel between the Salīmgaṛh and the Fort.

The Taḥṣīl, Ajmīr.

The conversion of the building, known as the Taḥṣīl in Ajmīr Fort, into a museum, is now nearly completed. It remains to fit *jali* screens and doors in the existing openings. The work has been noticed in a previous report,[2] to which there is little to add; but the accompanying illustration (Plate XIV), which has not hitherto been published, will serve as a record of the state of the building before it was taken in hand.

Owing to its being required for utilitarian purposes the exterior of the building has had to be repaired more completely than would otherwise have been done. The old work has, however, been faithfully copied in all its details, and the few new features, such as doors and *jali* screens, which cannot be dispensed with, are all in the strictest accord with the style of the period.

Although very little is at present known of the history of this building, its stones could probably tell many interesting tales of the courts of Akbar and Jahāngīr. There is reason to believe that it was built by Akbar in A. H. 978 (A. D. 1570) as the Daulat Khānah-i-Akbar Shāh or imperial residence.[3] It occupies the central and most important position in what was formerly the garden of the harem in Mughal times. Here Jahāngīr was living when Sir Thomas Roe was in Ajmīr, 'Adsmere' as he calls it.

Tradition says that subsequently the Mahrattahs, who were paramount in this

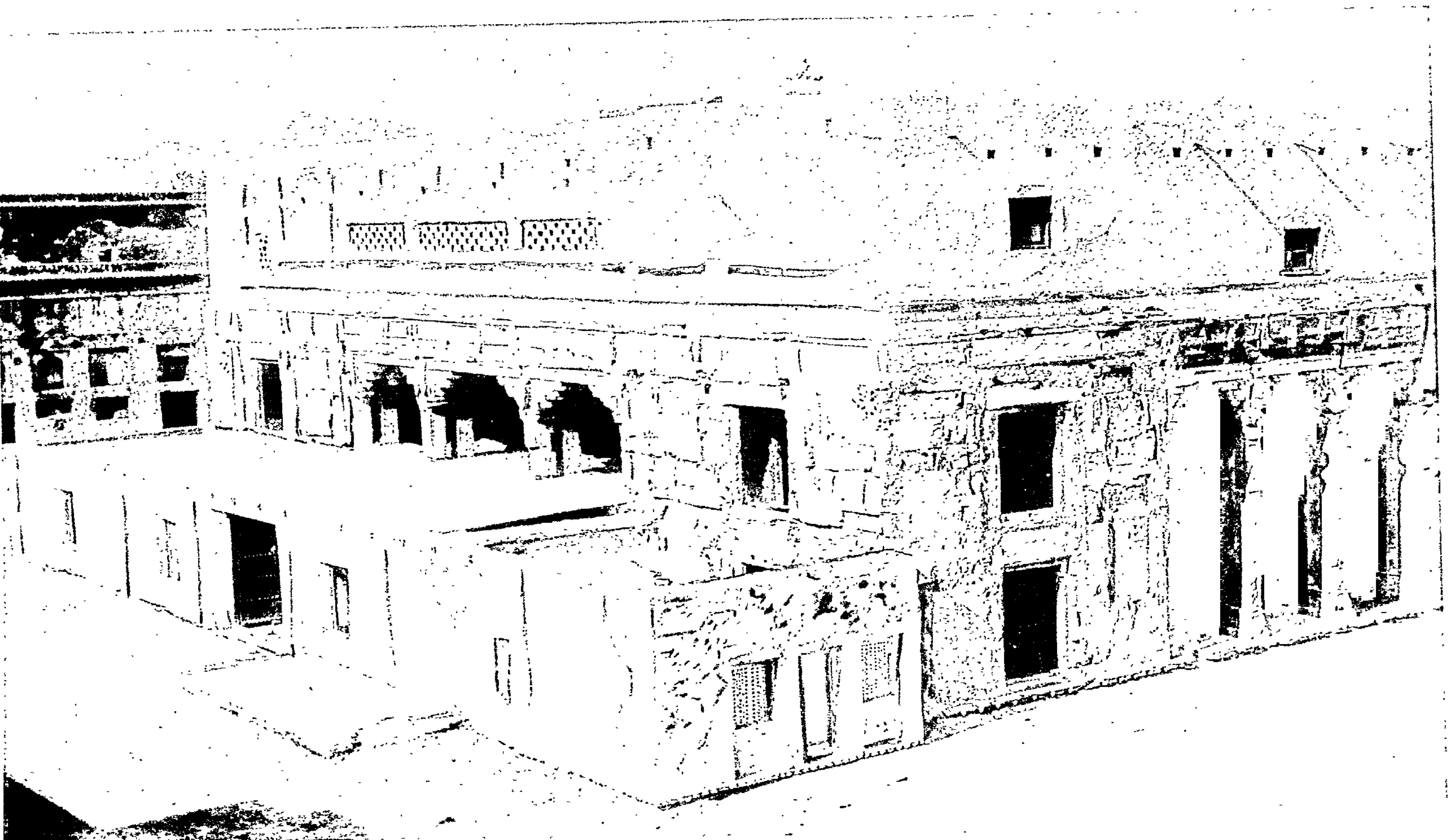
[1] Bernier, *Travels in the Mogul Empire.* Constable's edition, 1891, p. 242.
[2] *Annual Progress Report of the Archæological Surveyor, Northern Circle,* for 1904-05, Part II, Section 1.
[3] *Ahsan-us-Siar*, by Muhammad Akbar Khān. Agra, 1320 A. H.

part of India shortly before the British ascendancy, occupied the fort, and that their Sūbahdār or Governor used the Daulat Khānah as his residence. In the early stages of British rule the building was used as a magazine, and after the mutiny in 1857 it became a court of justice, from which it took the name Taḥṣīl, by which it is generally known in Ajmīr.

The building looks somewhat more spacious in the photograph than it is in reality. It contains only one room of moderate size, and four little square chambers, one in each corner, which are hardly more than closets. The interior still remains almost untouched, and patches of colour are still adhering to the stone mouldings to which it was directly applied. It should be mentioned that the small chambers had a frieze under the ceiling, consisting of a geometrical pattern chased in the stone and filled with a thin line of blue enamelled tilework. Some of this tilework still remained in the grooves, and after making several experiments the Executive Engineer has succeeded in replacing it where it was missing, with a very pleasing effect. Some of the mouldings on the exterior of the building also look as if they were grooved to receive similar tilework, but no pieces were found in them, and they have, of course, been left without any filling.

Although it is evident from the account of Sir Thomas Roe that the fort of Ajmīr contained all the usual appurtenances of a Mughal Palace in the time of Jahāngīr, subsequent occupants have left nothing worth preserving except the Taḥṣīl, a little marble pavilion on the roof of the courtyard, and the main gateway on the west side. The marble pavilion has lost its original roof, and the modern ceiling erected in its stead has already become rotten and insecure. This is doubtless due to the lack of the wooden ceiling being in direct contact with a thick layer of concrete above it. It is now proposed to erect a new wooden ceiling more in keeping with the style of the pavilion, with an air space between it and the masonry roof.

W. H. NICHOLLS.



THE TAHSIL, WITH MODERN ADDITIONS.


Nicholls



Fig. 1.

RESTORATION OF TWO ELEPHANT STATUES AT THE FORT OF DELHI.

AMONG the most interesting objects which the traveller Bernier saw at Delhi in 1663 were two imposing pieces of sculptures that stood on either side of one of the entrances to Shāh Jahān's citadel. These sculptures represented two life-size elephants, cut out of stone, on one of which, according to Bernier, was the statue of Jaimal, the famous Chief of Chitor, on the other the statue of Patta, his brother. "These," he says, "are the brave heroes who, with their still braver mother, immortalised their names by the extraordinary resistance which they opposed to the celebrated Ekbar; who defended the towns besieged by that great Emperor with unshaken resolution; and who, at length reduced to extremity, devoted themselves to their country, and chose rather to perish with their mother in sallies against the enemy than submit to an insolent invader. It is owing to this extraordinary devotion on their part, that their enemies have thought them deserving of the statues here erected to

their memory. These two large elephants mounted by the two heroes, have an air of grandeur, and inspire me with an awe and respect which I cannot describe."[1]

A few years after Bernier had seen these statues, they were noticed also by M. de Thevenot, who speaks of them very briefly in the third book of his travels, but adds nothing to Bernier's description.[2] This, so far as I am aware, is the last mention that we have of the elephants, while they were still standing. The next information about them comes from Lieutenant W. Franklin, who, writing in 1795, says that they had been removed by order of Aurangzeb, and the space where they stood enclosed with a screen of red stone.[3] The same story is repeated by Sayyid Ahmad, who adds that they were broken up by Aurangzeb, and when we remember the iconoclasm of which that Emperor was habitually guilty, we may well believe that such, indeed, was their fate. At any rate, they seem to have disappeared completely from view during his reign, and nothing more was heard of them until 1863, when a number of colossal fragments of two elephants and their riders were found buried under a house inside the fort. That these fragments form part of the famous statues seen by Bernier there can be no reasonable doubt, for not only is it improbable that there would have been two such pairs of elephants at the Delhi Fort, but the fragments found are of life size, as stated by Bernier, and in this respect unique of their kind in India.

The first account of this discovery is to be found in a memorandum contributed by General Cunningham to the *Journal of the Bengal Asiatic Society*,[4] in which he gives a short list of the more important fragments unearthed, adds some misleading remarks about the riders, and propounds a theory as to the history of the statues, which he afterwards discarded. A second and more mature article by the same writer appeared in his own Report for 1862-63.[5] General Cunningham's list of fragments was compiled before the excavations had been finished, and a more complete list was afterwards published by Mr. C. Campbell, who was responsible for collecting together and sorting the pieces. This later list comprises 117 fragments of a distinctive character, besides several hundred more or less shapeless ones, and 8 pieces belonging to the riders. In Mr. C. Campbell's opinion there were represented in this collection three separate groups of elephants and riders, and in order to account for the presence of a third group (he accepted the identity of two of them with those seen by Bernier) he made the improbable suggestion that it was set up "to commemorate the heroic mother of the two Hindoo Princes." This opinion of Mr. Campbell's as to the existence of three instead of two groups is not shared, be it said, by any other authority who saw the fragments when they were unearthed, nor is it borne out in any way by the collection of them which we still possess.

In other respects, also, it may be noticed, Mr. Campbell's account is far from reliable. Thus he tells us that "one of the hands (of the riders) is comparatively perfect and has a thumb on the exterior, *i.e.*, where the little finger ought to be, and *vice versâ*."[6] The hand, to which Mr. Campbell refers, can easily be recognised

[1] *Travels in the Moghul Empire by Francois Bernier* (transl. by A. Constable, 1891), pages 256-7.
[2] M. de Thevenot, *Travels into the Levant.* (London, 1687.) Part III, p. 42.
[3] *Asiatick Researches*, 1795, p. 429.
[4] *J. A. S. B.*, XXXII (1863), pp. 296-99.
[5] *A. S. R.*, I (1862-63), pp. 225-30.
[6] *J. A. S. B.*, Vol. XXXIII (1864), pp. 159-61.

among the fragments, and it is quite true that, at first sight, it looks as if the position of the fingers and thumb is reversed, but a little careful arrangement of the pieces would have shown Mr. Campbell that it is in reality quite correct.

Following on Mr. Campbell's account came a short note in the same journal by Colonel J. Abbott,[1] who was the first to connect Bernier's elephants with the fragments unearthed; but, with the exception of General Cunningham's second article referred to above, which was not published until 1871, nothing else of any import appears to have been subsequently written about these statues.

When in 1903, at Lord Curzon's request, I took up the question of rebuilding the statues, I was told by a certain Lala Kunnia Lal—a contractor of Delhi—that his father had purchased some of the fragments at an auction in the Fort, but whether this story was correct or not, it is difficult after this lapse of time to determine. He certainly showed me in his yard a number of blocks of the same black stone of which the elephants are constructed, but there was nothing in the form of any of them to indicate that they belonged to the elephant groups, nor do the mutilated inscriptions, which are carved on some of them, point to any connection. On the contrary, the existence of these inscriptions goes a long way to prove that they had nothing to do with the elephants, since it is most unlikely that General Cunningham, Mr. Campbell and Colonel Abbott would all have failed to mention these records, if they had been unearthed at the same time as the rest of the fragments. However this may be, a number of the pieces enumerated by Mr. Campbell have certainly disappeared at some time or other, though in view of the exceptional interest taken in the discovery at the time it was made and the fact that very soon afterwards (in 1866) an elephant statue was erected in the Queen's Gardens at Delhi out of all the pieces that could be utilised for the purpose, it is highly unlikely that anything of value has been lost.

On the other hand, it would seem that, in the case of the riders, we now possess more pieces than were known to Mr. Campbell. According to him there were "3 portions of a body, 4 fragments of arms, and 1 complete head;" but we now have 4 torsos and two heads, all of them undoubtedly belonging to the same groups. To account for this discrepancy, we must assume either that Mr. Campbell was mistaken as to the number, or that some additional fragments have been subsequently found, but when, or by whom, we have no information. That two heads and at least three torsos have been known for the last fifteen years, is proved by a photograph taken at the Delhi Museum in 1892, but further back than this, I have not been able to trace them.

The statue of the elephant and its rider erected in the Queen's Gardens was removed in 1892 to a spot on the Chāndnī Chauk, in front of the "Institute," and again, ten years later, to the opposite side of the same building. From the photograph reproduced in fig. 2, taken when it was in the last-mentioned position, it will be seen at a glance that this statue was of the very crudest description, constructed apparently by some mason accustomed to building stone walls but without any knowledge whatever of anatomy. To begin with, the body was made like

[1] *J. A. S. B.*, XXXIII (1864), p. 375-77.

a barrel, but quite flat beneath. Then, the neck was completely omitted. The lower jaw, also, was left out and the tusks consequently brought impossibly near the eyes. Again, the ears were much too far forward owing to the missing arch of the cheek-bone, while the ears themselves were made up of fragments which appear to have belonged to some purely decorative stonework. Mere anatomical deformities such as these were of course capable of correction at any time afterwards and would have mattered little, if those who perpetrated them had been guilty of nothing worse. The misfortune was that in order to make the old and finely moulded fragments fit into this shapeless effigy, some of them had had their surfaces ruthlessly cut and chiselled, their value being destroyed thereby for all time. Had the original fragments been at all crude or unnatural in form, it would of course have been reasonable and proper to

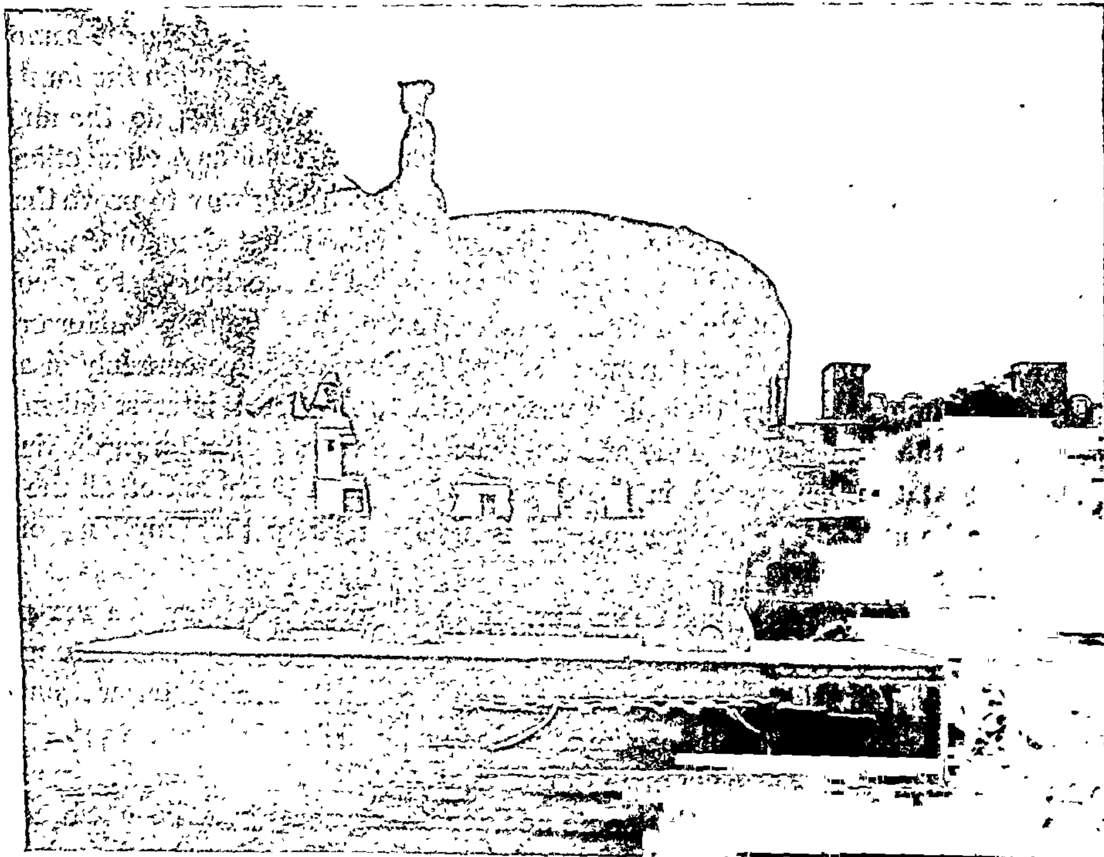


Fig. 2.

try and reconstruct the elephant on the same lines. But this was far from being the case. On the contrary, they are moulded with masterly skill and care, and though sufficiently conventional to lack neither vigour nor grandeur, their lines are remarkably accurate and true to nature. That the erection of such a hideous travesty of the original should have been suffered in the capital city of Northern India is, indeed, astonishing; still more astonishing is it that on the two subsequent occasions when it had to be taken down piecemeal and moved to a new spot, no one should have thought of rectifying its faults or of replacing it on the site where the two statues originally stood.

As regards the location of this site, there ought never to have been any difficulty or doubt whatever; for Bernier states explicitly that the statues stood outside the

Delhi Gate of the Fort, and his testimony is borne out by later authorities. As, however, two writers on the subject, Messrs. Carr Stephen and Keene, have tried to locate the statues elsewhere, it is advisable to consider the evidence in detail. After giving the description of the statues which I have quoted above, Bernier proceeds :—"After passing into the citadel through this gate, there is seen a long and spacious street divided in the midst by a canal of running water." The existence of this canal at the entrance where the elephants stood is also vouched for by M. de Thevenot. Now, the only street provided with such a canal, was the street leading from the Delhi Gate to the Inner Fort, as proved both by old plans of the Fort and by the existence of the canal in question at the present day. Moreover, a little further on, Bernier adds :—"The other principal Gate of the Fortress also conducts to a long and tolerably wide street, which has a divan on both sides bordered by shops instead of arcades. Properly speaking, this street is a *bāzār*, rendered very convenient in the summer and the rainy season by the long and high arched roof with which it is covered. Air and light are admitted by several large round apertures in the roof."[1] This can only be the long arcade which leads from the Lahore Gate towards the Naqār Khāna, and which is still in perfect preservation; no such covered arcade ever existed at the Delhi Gate.[2] Seeing how lucid and accurate these accounts of Bernier's are, it is inconceivable how Carr Stephen could have called them "so far faulty, that they jumble together the features of the two gates, and the description therefore is correct of neither," or could have come to the conclusion that they stood in front of the Naqār Khāna. The only shred of argument which he has to advance in support of his theory is that the Naqār Khāna was also called the Hathiyā Paul—Elephant Gate ; but even if this be true (and, at the best, there is much doubt about it) the name could easily be explained from the fact that the amirs and ambassadors, when attending the Emperor's Darbār, had to dismount and leave their elephants there.[3] On the other hand, Carr Stephen's appeal to "uninterrupted tradition" is wholly discounted by the testimony of Lieutenant W. Franklin and Sayyid Aḥmad—the only two authorities on whom we can draw for the purpose. The former, writing at the end of the 18th century, says that the elephants were removed by Aurangzeb from the entrance to the Palace, and that the place where they stood was enclosed with a screen of red stone. The screen in question is the barbican of red standstone erected by Aurangzeb in front of the Delhi Gate. Precisely the same tradition about the statues having stood outside the Delhi Gate is also preserved in Sayyid Aḥmad, who writing before the mutiny (at a time when an uninterrupted tradition really did exist) tells us that the Delhi Gate was known as the Hathiyā Paul on account of the elephants which once adorned it. "It is called," he says, "the Delhi Gate of the Fort, because it is situated towards old Delhi, the Akbarī Gate, too, because the road to Akbarābād is on this side, and also the Hatya Paul—Elephant Gate (*paul* being a Hindi word for gate), because in front of it were formerly erected two stone elephants

[1] *Op. cit.*, p. 258.

[2] It is worth noticing, by the way, that in Mughal days, when old Delhi still existed, the Delhi Gate was looked upon as the chief entrance to the Palace—a fact which is also apparent from Tavernier's description, in which the Lahore Gate is not even mentioned.

[3] *See* Carr Stephen, *op. cit.*, p. 222 ; Heber, *Narrative of a journey through the Upper Provinces of India*, Vol. II, p. 297 ; Tavernier *op. cit.*, II, 66.

of full size, huge and mountain like. But in the reign of Muḥyu-d-Dīn Muḥammad Aurangzib 'Ālamgīr both the elephants were broken. This faith-defending Emperor, thinking the erection of such sculptures at the gates against the faith of Islām and a custom of the Hindus, had them broken up. Before this gate there was no defence, and the gaze, passing over the city beyond the Delhi Gate, reached to the far off jungles. 'Ālamgīr thought this also improper. Providing a square in front of it, he made a gate on the other side, *viz.*, to the west. * * *. When Shāh Jahān, it is said, heard of it he wrote to 'Ālamgīr, 'Dear son, you have made the Fort a bride, and put a veil before her face.'"

As to the precise position of the statues outside the gate, the analogy of similar groups elsewhere left little room for uncertainty. Examples of such elephants or of

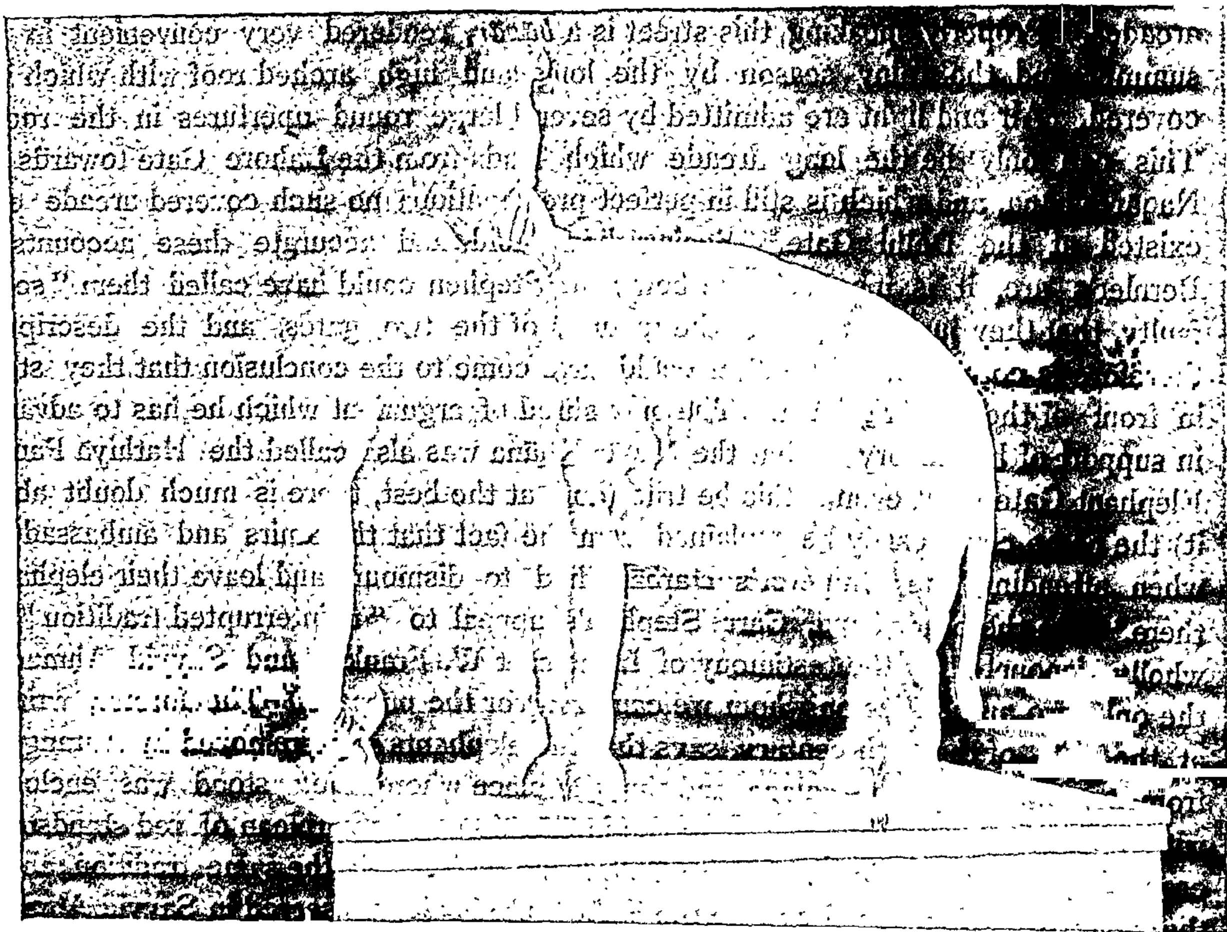
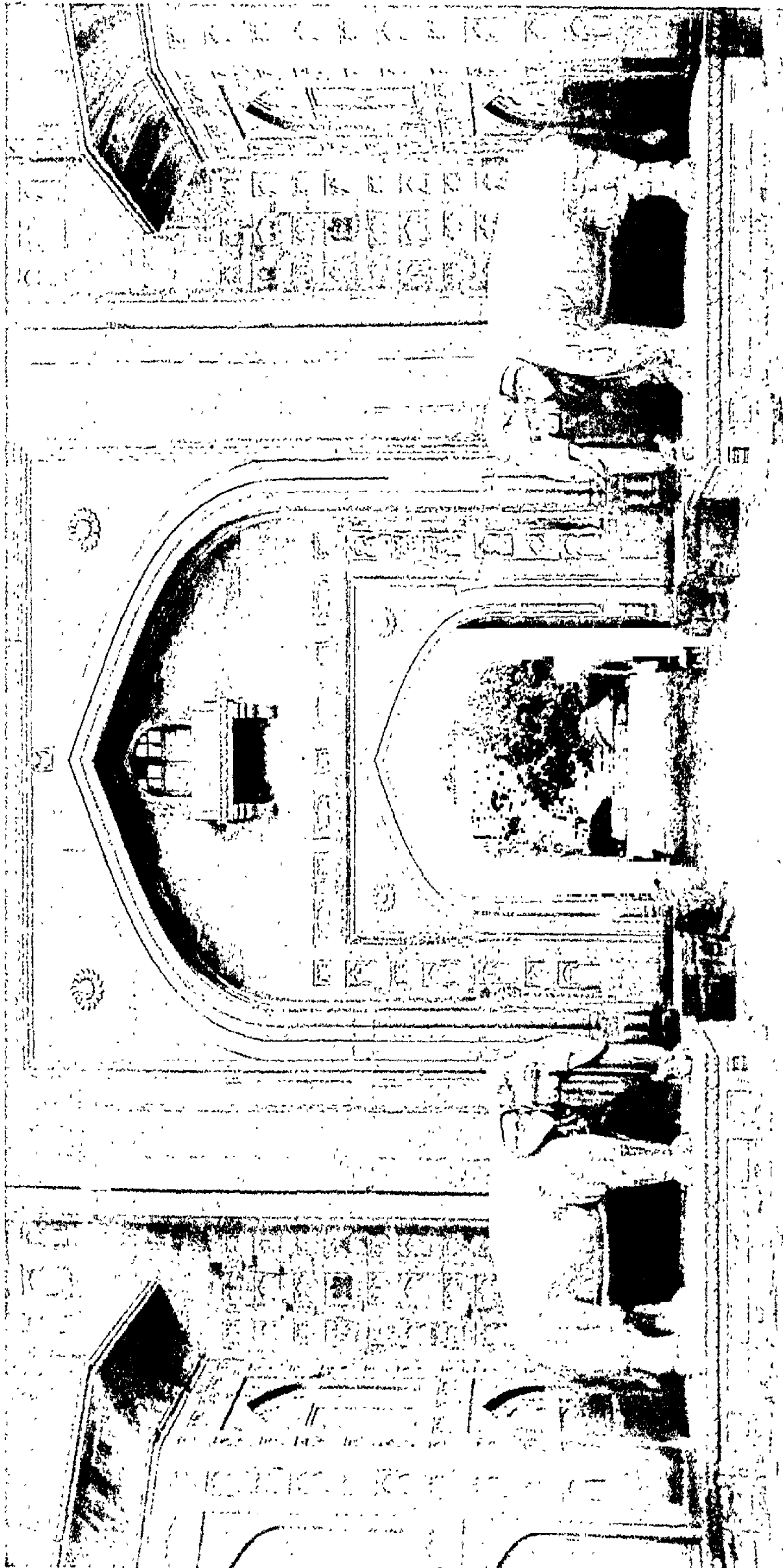


Fig. 3.

the pedestals on which they stood still exist at Māṇḍū, Fatḥpur Sīkrī, Agra and elsewhere, and in every case they are either carved in relief on the wall of the Fort itself or, if in the round, are set close against it on either side of the approach. This, then, was the position which it was natural to expect they had occupied at the Delhi Gate, and it was made all the more likely because on each side of the gateway was an angle in the wall just like those occupied by the elephants at the Agra Fort, and the space moreover afforded by these angles was precisely that required for the elephants. At this point, therefore, excavations were started for the purpose of sinking foundations for the pedestals; but, no sooner had the ground been broken than the original

PLATE XVI.



TWO ELEPHANT STATUES RESTORED AT THE DELHI GATE.

foundations came to light. This practical discovery, as fortunate as it was unhoped for, thus set at rest all doubts on the point, and disposed once and for all of a much vexed question.

With the position of the elephants thus determined, the next step was to set about reconstructing the statues themselves, and here a great difficulty presented itself. Had the old elephants been the stilted and lifeless creations of Mughal artists, such as we constantly see in the Agra Fort and elsewhere, it would have been a simple and straightforward matter for the present day masons of Agra, who are endowed with all the hereditary instincts of their forefathers and whose work is characterised throughout by the same spirit and the same technique, to reproduce them with perfect fidelity and exactitude. But, as I have said above, the remains which we possess are of a much superior type and belong to a school of sculpture of which the traditions have long since passed away. This being the case, and as there was no Hindu or Muhammadan with the necessary training or skill to carry out the work satisfactorily, it was decided that the best course would be to commission a European artist to prepare a careful model first, and then to make this over to a native sculptor to reproduce to the proper scale in stone, so that, while accuracy and true proportion in general anatomical features would be secured, there would be little risk of infusing a European spirit into the sculpture. Mr. R. D. Mackenzie, the artist to whom the work was entrusted, had already had a wide experience of Indian art, and the confidence which was felt in his ability to carry out this particular work, was amply justified by the minutely accurate copies which he proceeded to make of all the essential fragments, and the care with which he afterwards reconstructed them into a complete model. A photograph of this model, which was made to a scale of one in six, is shown in fig. 3. Owing to the difficulties and uncertainties connected with them, no attempt has been made, it will be observed, to restore either the riders or the harness of the elephants, which we know existed on the old statues; but, for the rest, there is no doubt that Mr. Mackenzie's conjectural restorations of the missing parts are remarkably happy and conform very faithfully to the character of the original fragments preserved to us. If any criticism at all can be ventured, it is, that the model shows slightly less schematic treatment in certain details than we should expect, but it must be remembered that this spirit of conventionality was purposely toned down by Mr. Mackenzie, in the model, in order that it might not be overdone by the Indian sculptors when carving the statues themselves, as it was foreseen that their work would in any case tend towards greater conventionality. It was well, indeed, that he made provision for this, for a glance at the photograph on Plate XVI and fig. 4 will show that they are in fact appreciably more schematic than the model, and had this trait been further intensified they must have failed as good presentations of the old work.

After what I have said above about the maltreatment of some of the original fragments, it is needless, perhaps, to state that it was found impracticable, even if it had been desirable, to build them into either of the new statues. Such a course would have meant either having ugly and conspicuous patches in the statue wherever the blocks had been cut away when the old statue was erected in the Queen's Gardens, or would have involved recutting and dressing the blocks in question—a solution

which was of course not to be thought of. There was nothing for it, therefore, but to construct both statues entirely afresh and to place the original fragments in the Fort Museum near by, where they can be seen by any one and compared with the restorations.

With regard to the trappings to which I have referred above, General Cunningham writes that among the fragments unearthed were "several pieces of a howdah. The chains are formed of yellow stone let into the black stone of the howdah; similarly, the cotton ropes which fastened the howdah, are formed of white marble. There are also pieces with straight lined ornamentation in white and yellow stone let into the black stone, which, I presume, must have represented the decorated borders of the *jhal* or cloth trapping, which is usually embroidered in gold and silver."[1] Mr. Campbell also speaks of fragments of a howdah,[2] probably repeating General Cunningham's first idea.

In his later and more mature account, however, published in 1871,[3] General Cunningham says nothing of a howdah, though he speaks of "housings," and this discrepancy in his accounts is significant because at the present time there are no pieces existing, which could be assigned to a howdah, though there are several which formed part of the harness, and it would seem, therefore, that General Cunningham himself felt some doubt about his first description of the pieces and altered it intentionally. However this may have been, an examination of the original fragments proves conclusively that there never could have been howdahs. Fortunately, a large section of the spine and back of one of the statues is preserved intact, and the stone is polished perfectly smooth without any trace whatever of a howdah having been affixed to it. The legs moreover of the riders are grooved out on the underside to fit the back of the statue, which would assuredly never have been done if they had been placed on a howdah. In this connexion, the beautiful sardonyx cameo of Mughal date (fig. I), which I purchased a few years ago for the Lahore Museum, is of some interest, as it shows approximately the details of the harness and the positions of the riders as they appear to have been on the Delhi elephants and as we find them also in many Mughal paintings.

It remains to say something about the history of these two famous elephants before they were erected at the Delhi Fort. On the pedestal of the elephant set up in the Queen's Gardens the following inscription was carved:—"This elephant, a work of considerable but unknown antiquity, was brought from Gwalior and set up outside the south gate of his new palace by the Emperor Shāh Jahān, A.D. 1645. Removed thence and broken into a thousand fragments by the Emperor Aurangzeb, it remained forgotten and buried underground for more than a century and a half and until, having been recovered, it was set up here A.D. 1866."[4] At its second removal, this record was continued: "(it was set up) in an unfrequented part of these gardens A.D. 1866, removed again to the spot at the expense of Lala Shimbhu Nath, Municipal Commissioner, 1892." The fictitious history contained in this inscription originated with General Cunningham, whose first surmise[5] was that the elephants discovered were identical with a group at Gwalior mentioned by Bābar and Abu-l-Fazl,

[1] *J. A. S. B.*, XXXII, p. 297.
[2] *Ib.*, XXXIII, p. 159.
[3] A. S. R., I, 230.
[4] Carr Stephen, *op. cit.*, p. 222.
[5] *J. A. S. B.*, XXXII, p. 297.

and last noticed by an English merchant who visited that fort in the reign of Shāh Jahān. This theory, however, was given up by General Cunningham after his attention had been drawn to Bernier's account, and he then proceeded to put forward another hypothesis as groundless as the first, *viz.*, that they were brought to Delhi from the Agra Fort. It is true that the Agra Fort is known to have possessed such statues, but the pedestals which still exist there do not suit the Delhi elephants at all. The fact is that, as I have already indicated, it was the fashion of the time to set up elephant statues at one or other of the Gates of almost *every* important fortress, so that the mere fact that elephants are known to have existed at two of these particular forts is no reason whatever for trying to find a connection between them. Of course, if there is any truth in Bernier's story that the riders represented Jaimal and Patta, the presumption is in favour of their having been erected by Akbar rather than by

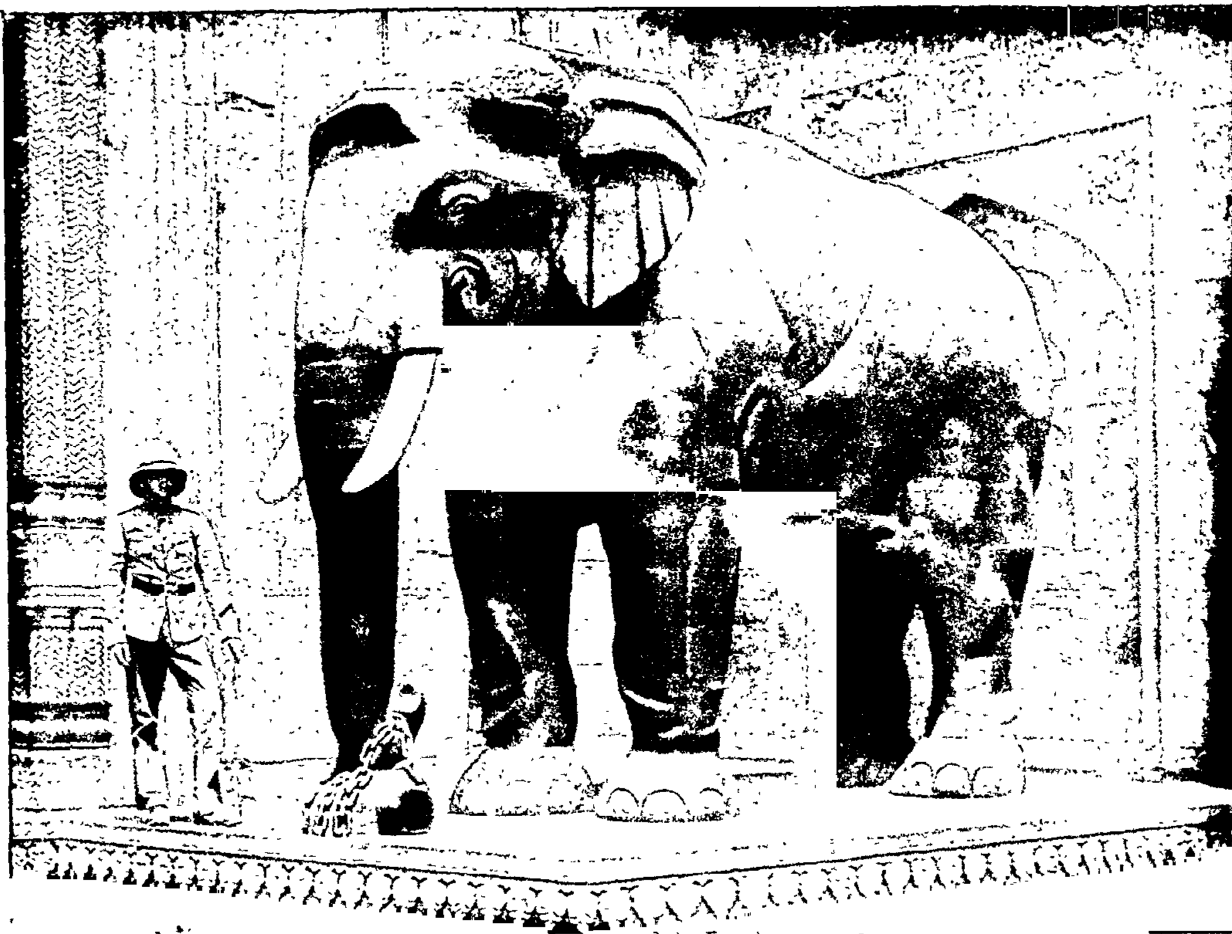


Fig. 4.

Shāh Jahān. But, had they been erected by Akbar, we might reasonably expect that Bernier would have mentioned the fact of their removal, or that we should have found some reference to their erection in the historians of Akbar. Personally, I do not regard Bernier's romantic story as in the least degree likely. Although we cannot dogmatise on the point, the probability is that the figures represent nothing more than the ordinary riders, whom we see depicted—two on each beast—in representations of elephant fights. Certainly, their costumes and the absence of howdahs on the elephants is in favour of this supposition. In this connection, by the way, it may be

noticed that General Cunningham attempted to prove, from the fact of their garments being fastened on their right side, that the riders were Hindus and not Muhammadans, but any one who takes the trouble to look at contemporary pictures of the Mughals will see that all classes of Moslems at that date, from Emperors to mahouts, made a general practice of fastening their garments on the right side, so that the evidence, such as it is, is the reverse of what General Cunningham states.

One fact, which their material, style and technique establish beyond a doubt is that the riders were carved by Mughal sculptors, and another fact which seems no less certain is that the elephants belong to a wholly different school of art. Where and when the latter were made will perhaps never be known, but we may well believe that they were the spoil of war brought from some captured Hindu city, and that the riders were added to them when they were set up before the Delhi Gate. No doubt, it would have added to the interest of the groups, if the riders also had been restored, but in the original statues the red sandstone of which they are made was covered over with stucco and painted, and the difficulty of reproducing either stucco or paint successfully precluded the possibility of restoring them. Without the harness, too, which could not be added for lack of sufficient accurate details, the riders could never have looked well.

J. H. MARSHALL.

THE RESTORATION OF THE JAINA TOWER AT CHITORGADH.

LOOKING back down the misty vistas of time we dimly discern the hazy outlines of the old world's happenings. We get a shadowy glimpse of an ancient kingdom, sacked and laid desolate, in a far-away corner of Kāthiawād; of a widowed queen seeking refuge with her forest-born son amongst the mountain fastnesses of Central India; of that youth's growth to manhood and chieftainship among the wild Bhils; of his son's prosperity and the founding of his capital at Nāgdā, amongst the picturesque hills and valleys of Mewār; and, after various vicissitudes of fortune, another forest-bred member of the family carving out for himself a kingdom around the impregnable rock of Chitor.

Chitor, or more properly Chitorgadh, is a long isolated hill lying about seventy miles to the east of Udaipur in Mewār, and is at the junction of the Udaipur-Chitor Railway with that of the Rājputānā-Mālwā line running north and south from Ajmer to Khandwā.

Before ever Udaipur was built, Chitor was the fortress-capital of the Mewār family, the Sisodia Rajputs, whose story emerges from the mist of legend into the light of history with Bappa's assumption of regal powers upon this hill-fortress, somewhere about the eighth century of our era. This, however, is not the place to trench too much upon the domain of history, to follow in detail the fortunes of the family, or to tell of the many thrilling events connected with their long occupation of the hill. It would take too long to relate the stories of the various Musalman invasions and the bloody contests that were fought upon the slopes of the hill when 'Alā-al-din of Delhi, Bahādur Shāh of Gujarāt, and the great Akbar successively brought all their forces to bear against its walls; of 'Alā-al-din's futile endeavours to obtain the person of the beautiful Padmini, whose woman's wit was more than a match for the Mughal's treacherous wiles; of her immolation, with that of all her maidens, and the wives and daughters of all the Rajput chiefs, which took place upon the top of the hill as their husbands fell in a last defence at the foot; or of later events, when the family abandoned the grand old fortress for their new capital of Udaipur. All these form fascinating subjects for the poet or painter; and the

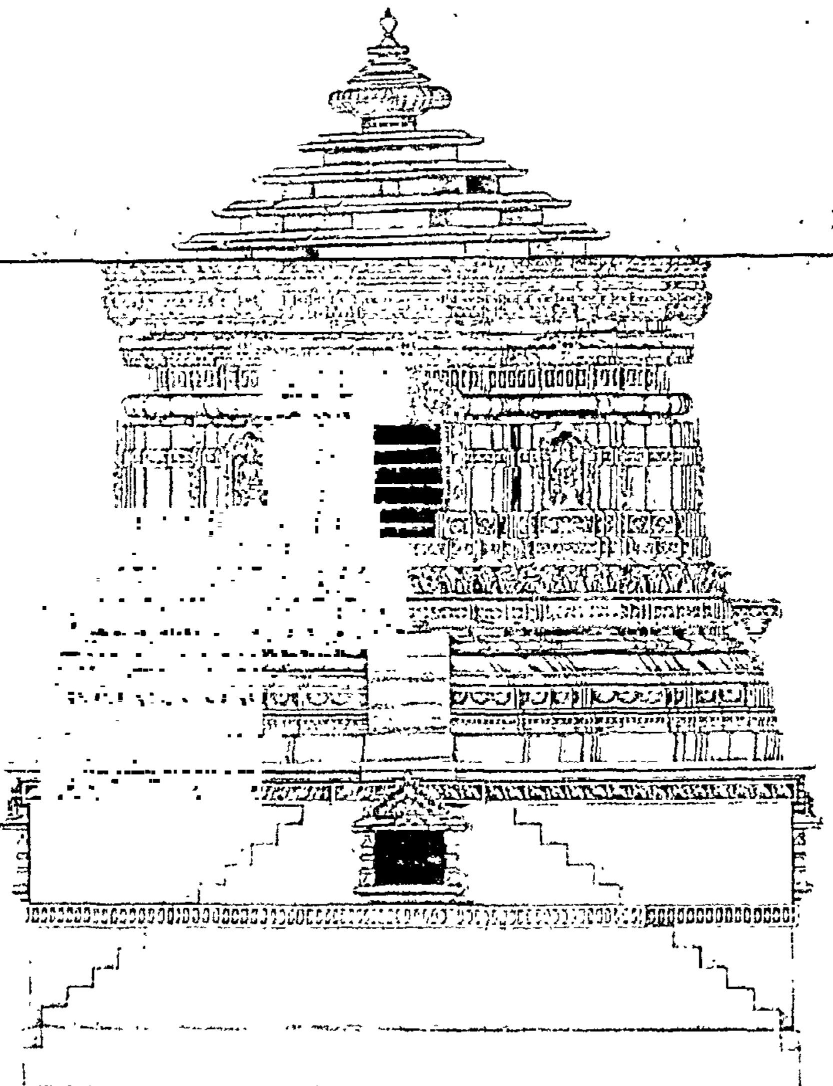
reader, who would like to know more, must go to Tod and his delightful pages, where he can revel in romantic stories of a chivalrous age to his heart's content.

Now and again, amongst all these stirring times, there were spells of peace and prosperity when Chitor's rulers could turn their thoughts from war to the arts of peace, and were able to adorn their capital with monuments to their gods, with palaces for themselves, and spacious reservoirs and tanks for their people. Jains vied with Hindus in the erection and dedication of beautiful fanes to their respective deities. It must have been at some such time that Kumārapāla, the great Solanki king of Gujarāt, hearing of all this magnificence, paid a visit to the hill, about the middle of the twelfth century, and left an inscription, recording his impressions, in the old temple at the foot of Rājā Kumbha's tower. He tells us that king Sol, in his daily progress across the heavens, drove his chariot very cautiously over Chitor, lest he should damage it against the lofty pinnacles of the shrines.

Amongst the remains of its ancient glory, two of the most remarkable buildings on the hill are the lofty towers, one of which, the Jaina tower, is one of the oldest buildings. It is about eighty feet high and was probably built about A. D. 1100. My reasons for assigning it to this date are given in full in my Progress Report for the year ending the 30th June 1904, and are too long to go over again here. In that account I have taken no notice of Fergusson's statement about the earlier date as deduced from an inscription found at the foot of the tower. If he got this information from Tod, it is sufficient to make it very doubtful, since Tod's versions of inscriptions, since republished, are anything but reliable. Moreover, the slab appears to have been a loose stone lying upon the ground, with nothing to show that it was ever connected with the tower; and there are still numbers of sculptured stones lying about belonging to buildings now no more, and, perhaps, older even than the tower. This inscription, however, is not now forthcoming. The record was probably ambiguous enough to require all Tod's wealth of fancy to connect it with the building. The record of the tower itself—its style as compared with other buildings of known dates—is a surer authority to rely upon. It belongs to the Digambar Jains, many of whom seem to have been upon the hill in Kumārapāla's time, though there must have been few, indeed, during the reign of Rājā Kumbha, all the Jaina shrines of his time having been erected by the Swetambara sect. In my report I have described it as a glorified *stambha*, such as is constantly seen, on a very much smaller scale, set up before Jaina temples to carry a *chaumukha* image, *i.e.*, a square block upon which a Jaina image is sculptured upon each of its four sides. At a subsequent visit, since writing that report, I discovered, among the débris of sculptured stone by the foot of the tower, a portion of just such a *chaumukha* image as would be in good proportion if set up in the pavilion on the top of the tower (see fig. 1, and compare it with the top of the *samavasaraṇa* on

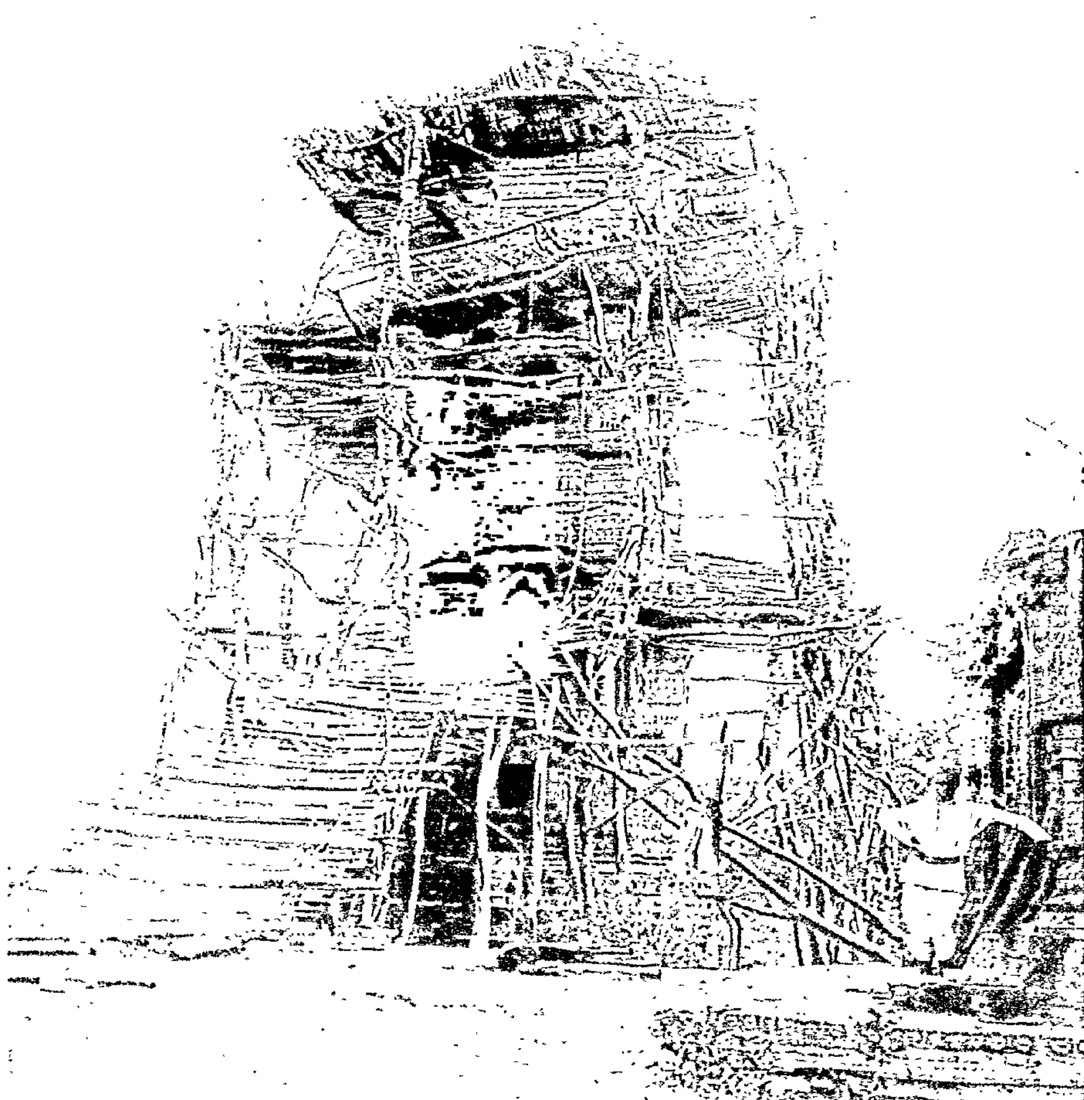


Fig. 1.

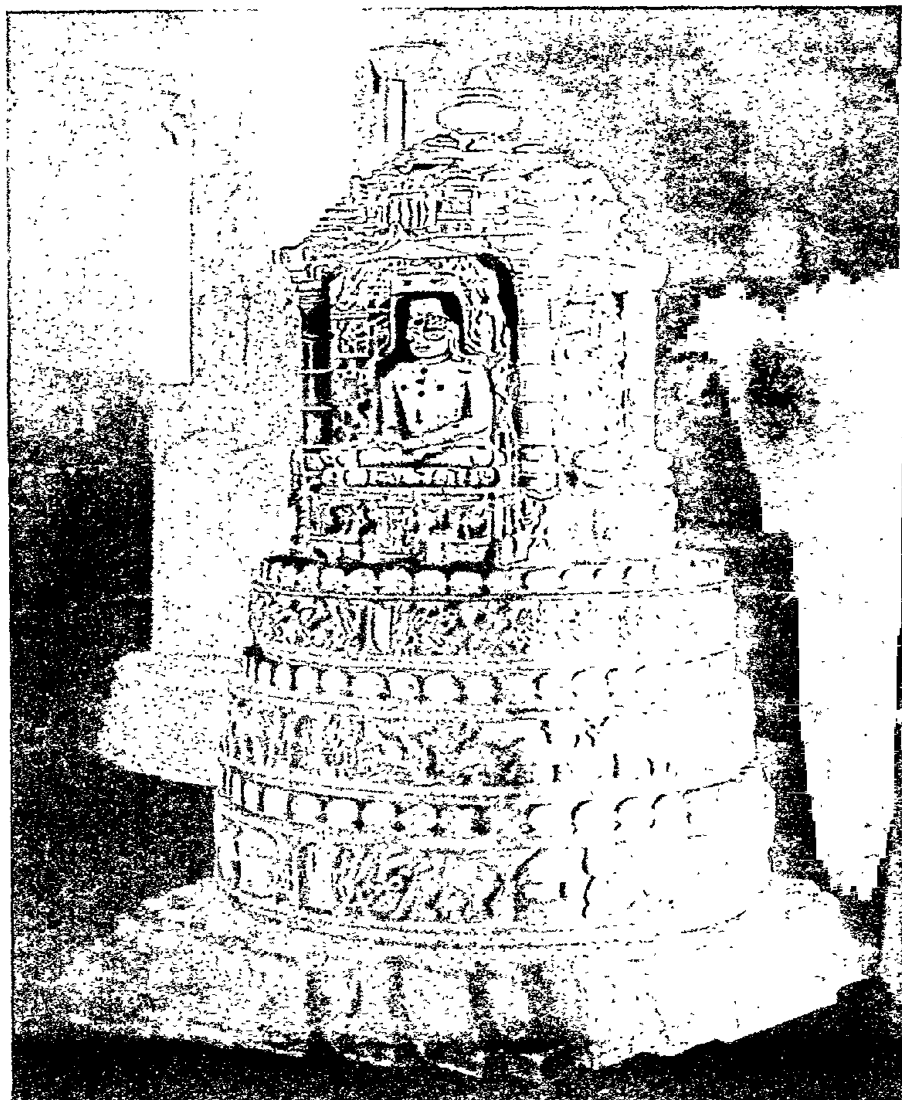


TOWER OF FAME ON CHITORGARH HILL: MEYWAR.

JAINA TOWER AT CHITORGARH.



a. TOWER IN COURSE OF REPAIR, SHEWING SCAFFOLDING.



b. CHAUMUKHA OR SAMOSARANA FROM DILWADA, ABU.

Plate XVIII, b). The *stambhas*, usually called *kīrtistambhas* (pillars of fame), set up before Jaina temples, have also a miniature pavilion or canopy over the *chaumukha*. If this tower had been originally connected with a temple, that temple probably stood upon the site of the present quarry to the east. The *Swetambar* temple, now standing beside the tower to the south-east, has no connection with it, having been built quite three hundred and fifty years later. But within the *śikhara* of this temple, there are seen sculptured stones, used to fill in the hollow core, showing that a previous temple must have existed near by. The quarry was no doubt made in later times to get stone for the building of the great walls of the fortification.

This brings us to the matter of this paper, which is to describe the reconstruction of the upper part of this tower. Sir Charles Rivaz, during his tour in 1899, visited Chitor and noticed that the Jaina tower was in urgent need of conservation. He found that the top storey was much damaged, and that the whole building had ominous cracks in it, so that it seemed as if it might collapse at any moment and be irretrievably destroyed. This he brought to the notice of the Government of India, and they addressed the Honourable the Agent to the Governor General in Rājputānā, requesting him to bring the matter to the notice of the Udaipur Darbār, with the result that H. H. the Mahārānā expressed his willingness that an expert be sent to advise regarding the necessary repairs. I was instructed to visit Chitor in the ensuing cold season, and, after examining the tower, to submit my report upon what measures were necessary in my opinion for the conservation of the monument. This I did. I found that the masonry of a considerable portion of the top was badly cracked and displaced. The crowning pavilion was a wreck, and was in such a condition that the slightest movement whatever, even through the disintegration or cracking of a stone, would probably have brought the whole mass down. The pyramidal-roofed pavilion, originally supported upon twelve slender pillars, had lost four of these, which, in falling, had carried away portions of the roof; the remaining pillars, with their superstructure, and dangerously hanging beams, were in a very insecure and unstable state. Yet it is marvellous how this had stood in much the same condition for very many years previously, testifying to the total absence of earth tremors in that part of the country all that time. Mr. H. B. W. Garrick, who visited it twenty-four years ago, wrote: "A careful examination of this building convinces me that it is absolutely unsafe, and the authorities will prevent a catastrophe happening sooner or later, by taking steps to forbid pilgrims and others from ascending or entering it. The whole building is considerably out of the perpendicular, and the walls inside bulge out in several places in a most alarming manner. In addition to this, some of the small columns, which are supposed to support the roof of the bow-window-like arrangements used as seats, lean in all directions and support nothing. It is needless to mention that the north side of the topmost storey has long since fallen away, carrying with it nearly one-third of this chamber."[1]

I came to the conclusion that the only way to render the tower secure was to take down about thirty feet of the top, and rebuild it with clamped masonry. It promised to be a difficult piece of work to carry out without accident, not so much the rebuilding as the first dismantling. I recommended that before starting work upon it, a

[1] Archæological Survey Reports, Vol. XXIII, p. 118.

photograph of each of its four sides should be taken, and, in dismantling, that every stone should be numbered, and every course should be laid out separately upon the ground below. In addition to this a few minor measures were also proposed. In September the Honourable the Agent to the Governor General reported to the Government of India that the Mewār Darbār had promised to take the repairs in hand shortly, and would apply for any further assistance necessary when the upper portion of the tower was dismantled. The course of work upon the tower can best be described in the words of Mr. S. O. Heinemann, Manager of the Udaipur-Chitor Railway, to whom was entrusted the supervision of the work: "Dismantling was, however, undertaken in August, 1902, and the crowning pavilion and about 15 feet of masonry below removed. The work was then stopped after His Excellency the Viceroy (Lord Curzon) had visited the tower, until further advice had been obtained. This was due to Mr. Lillie, then Manager of the Udaipur Railway, expressing his opinion that for safety the whole structure should be dismantled. His Excellency did not agree with him and requested the Director-General of Archæology, Colonel Sir Swinton Jacob and Mr. Cousens to state their views. Their opinions were practically identical and were given in a communication from Mr. G. G. White, Secretary to the Honourable the Agent to the Governor General, Rājputānā, dated 16th September 1903, to the address of the Resident in Mewār; the actual note being written by Sir Swinton Jacob.

"The conclusions arrived at were as follows:—

1. That it would be necessary to dismantle about a further 8½ feet from the present top, *i.e.*, about 23½ feet altogether.

2. That before further dismantling was done, good photographs should be taken of each face, from which enlargements could be made.

3. That plans of each storey should be made on level ground, so that each portion when taken down might be placed on the ground in the exact place it occupied in the building.

4. That the north side walling should be taken out as far as the bottom of the next projecting window, 15 feet in all from the present top (*i. e.*, 30 feet from the original top) and rebuilt.

5. That 5 feet more should be removed from the north-east corner and rebuilt.

6. That the carved heading over the projecting window, next below this point on the north side, should be reset, or the space (about ¾″) between it and the existing wall at the back to which it did not appear to have been bonded, should be refilled.

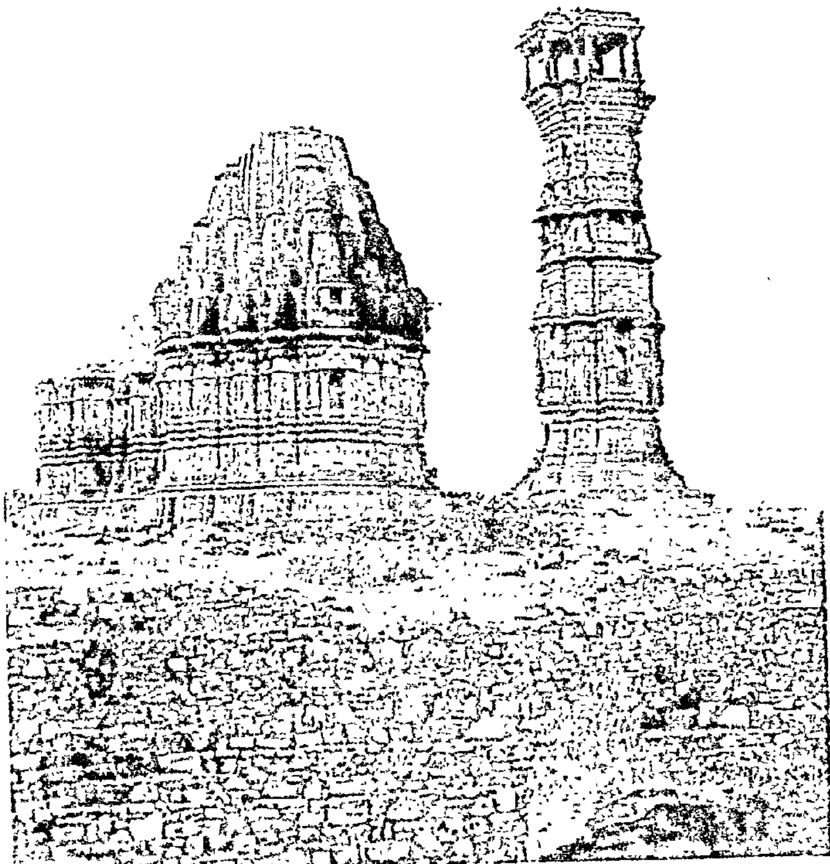
7. That on the east side all broken stones about the upper projecting window should be removed, leaving the bracket or supporting stones at the bottom which appeared sound. That, after thus reducing the weight, all broken stones below should be taken out as far as the bottom of the next lower projecting window. That this portion should then be rebuilt up, bonding the new with the old work on both sides.

8. That on the south and west faces only those stones which were broken should be taken out and replaced.

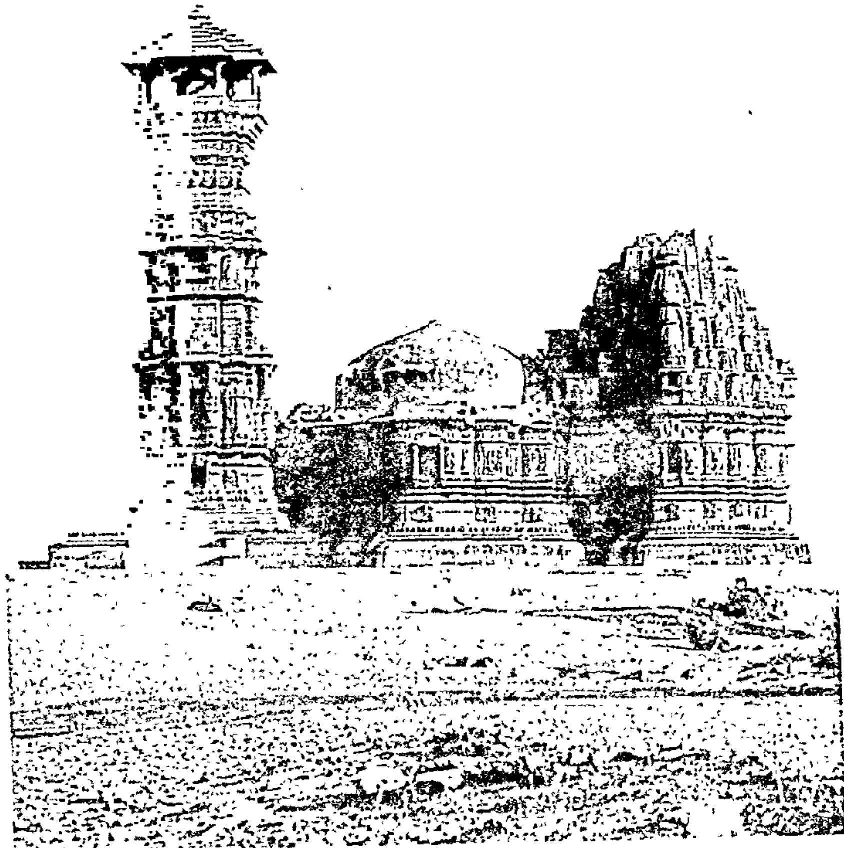
9. That all joints everywhere should be filled up with cement to exclude air and water, or anything entering the crevices, but that the filling of the joints should be as inconspicuous as possible, and pointing should in every case be avoided.

10. That the portion removed should be rebuilt as before.

JAINA TOWER AT CHITORGARH.



a. BEFORE REPAIR.



b. AFTER REPAIR.

11. That all new stones should be stained artificially so as to tone them in colour to harmonize with the surrounding masonry.

12. That great care should be taken in the carving of the new work intended to replace the old broken parts. That constant European supervision would be absolutely necessary for success in this department of the work, and unless the native sculptors could be directed by a competent critic, no attempt should be made to recarve any free ornamentation upon the restored masonry.

13. That on completion of the work a lightning conductor should be fixed to the tower, with a properly constructed earth connection, which together with the conductor should be tested annually in the hot weather and kept in working order.

14. That a slab should be inserted in the plinth giving a few particulars of the history of the tower and the date of these repairs, associated with the name of the present Maharana; the name of the mistri by whom the work was supervised being also inscribed in some suitable place.

" The contents of this note were sent to His Highness, and, in January 1904, His Highness proposed that the work should be put under me. When I first inspected the work on March 6th I found that work was already in progress under Gajdar Bhagwan, and that the remaining dismantling had been done, but no photographs had been taken, nor were the dismantled stones numbered, and only roughly laid in on the ground.

" The scaffolding surrounding the tower was a marvel of native ingenuity (see Plate XVIII, a.) and, though in appearance very unsafe, was in reality quite capable of the work required of it. All the stones, some weighing several hundredweight, were carried up and down this by coolies, and the local labourers could not be persuaded to use pulleys.

" Mr. Cousens again visited Chitor in April and examined the progress of the work, and made a rough drawing of the roof of the tower; this was afterwards worked up by him and the finished work was done from his drawing. From this date the work progressed steadily until completion; the first months were spent in the work of carving new stones to replace those broken, and these, as made, were laid out and fitted to the old ones on the ground at the base; in this manner, the stones were prepared for several courses before the erection of them was taken in hand.

" The carving was done upon stone obtained from a quarry some three miles to the east of the hill, and is in all probability the same from which the original stone was taken. At first there was some difficulty in obtaining stone, but this was overcome, though enhanced rates had to be paid, as only stones of fixed sizes were required and each had to be quarried separately, and there was no sale for the waste; the stones were also of exceptional sizes and cost a good deal to handle.

" The carving was done entirely by local masons, from Udaipur, and their work was exceptionally good, provided they were given plenty of time. The rates of pay for these men were small compared with the fineness of the work they carried out, but they were quite content with what they got. The pay varied according to the work given to them asons, from 0-12-0 to 0-4-6 Udipuri a day (equal to about 0-9-0 to 0-3-0 Koldar). Those obtaining higher pay did the fine finishing work, while those on less prepared the stones for them.

"The tools used by these masons consisted of :—

A rule, 12 inches long, divided into inches and eighths of inches.

A square, $7\frac{1}{2}'' \times 4''$.

A pair of compasses.

2 pointed tracers, one fine and one heavy.

6 chisels, $\frac{3}{4}''$, $\frac{1}{4}''$, $\frac{3}{16}''$, $\frac{1}{8}''$, $\frac{3}{32}''$, and $\frac{1}{16}''$.

"The larger of these being made of old files and the smaller from any old pieces of steel. These tools required constant sharpening as they soon lost their edges.

"While supervising the work Gajdar Bhagwan made a detailed drawing on a large scale of the tower, which is a very fine piece of drawing (Plate XVII).

"When re-erection was started, each stone was carefully bedded and clamped to the adjoining ones by iron lugs, the whole work therefore is of a very solid nature. The crowning *chhatri* is almost entirely new, and the roof is left hollow, where possible, to reduce the weight on the pillars. This roof, as before mentioned, was designed by Mr. Cousens from stones found near the base.

"A drawing has lately been sent from the Agent to the Governor-General's office at Mount Abu to the Resident, which shows a portion of the roof as it was in 1883, and had this been forthcoming earlier it would have saved much trouble. It, however, is identical with that Mr. Cousens supplied to me to work from.

"The re-erection was completed in June 1906, after which a lightning conductor was put up and the new stones coloured to harmonize with the old. This latter was done with a mixture of earth charcoal, red earth, oil and water, the stones being first saturated with water and the mixture then applied. Care was taken not to mix the ingredients too much so that a mottled appearance was obtained. This colouring has now been subjected to a heavy monsoon and has stood the test well.

"Before the colouring was done the joints were, in the case of new work, raked out and, in the old work, cleaned, and cement was run into this which was again raked to about the depth of an $\frac{1}{8}$th of an inch so that it should not appear on the surface.

"The ground round the tower has been levelled and cleaned of scrub, etc., the adjoining temple cleared of creepers, and the stairways to its *chabuttra* repaired, the whole now forming a complete group.

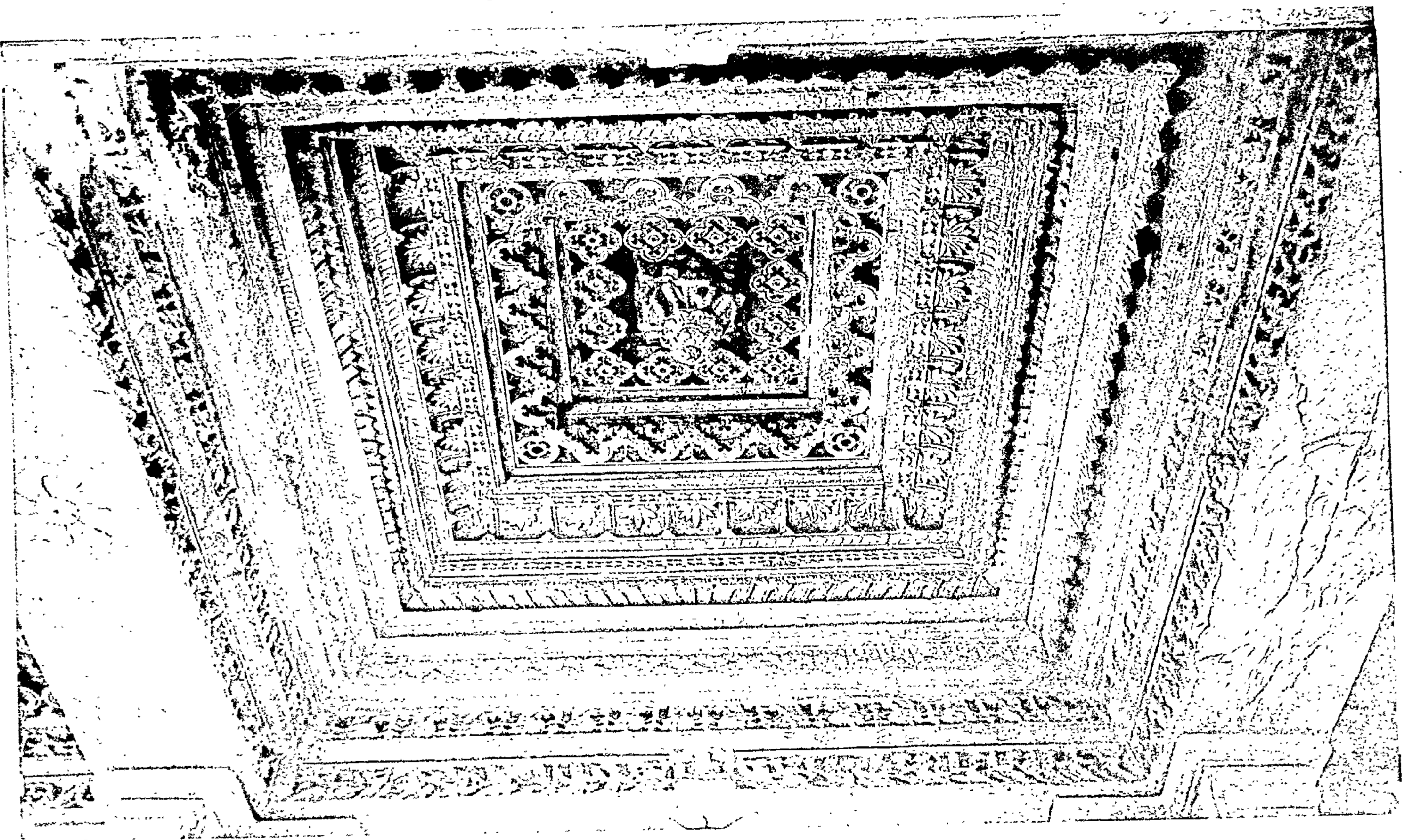
"The amount spent on the work before the accounts were taken over by me was Rs. 5,400. Since then Rs. 16,600 have been spent, making the total cost of the restoration about Rs. 22,000.

"I must put on record the splendid way in which Gajdar Bhagwan worked, and whose knowledge of native architecture and methods of work were invaluable."

I heartily endorse Mr. Heinemann's note of appreciation of the services of the Mistri in charge. He worked with much intelligence and was in full sympathy with the work throughout.

In the illustration of the tower before restoration, there are seen no *toranas*, as are shown spanning the pillars of the canopy in the photograph taken after restoration. That these existed originally was shown by the little corbels upon the pillars upon which they rested. We are told by Major A. H. Cole, in one of his reports upon the conservation of ancient monuments, that there were struts (*toranas*) between each pair of pillars on the Jaina tower *chattri*, one of which remained in 1883. As the corbels

JAINA TOWER AT CHITORGARH.



CEILING IN THE TOP PAVILION.

showed, they were not between each pair but only between the forward central pair on each face.

Around the margin of the platform, on which the pillars stand, a low parapet wall is seen in the restored picture. A portion of this was still in its place on the shattered tower, and a good deal more of it was found lying below. The restoration of this makes the pillars look shorter by hiding a portion of their shafts.

It is to be hoped that this is but the beginning of conservation measures on the hill, and that His Highness the Mahārānā, who has responded so liberally in this case, will be able to see his way to allotting a little more money to put some of the other deserving buildings into a state of safety. This was a big work; what remains to be done on the hill is but petty repairs.

His Highness was fortunate in his selection of Mr. S. O. Heinemann to superintend the work, to whom all praise is due for the able and sympathetic manner in which he saw it through.

HENRY COUSENS.

Postscript.

Since writing the above Mr. D. R. Bhandarkar has found a manuscript in the Deccan College Library, Poona, called the *Śrī-Chitrakūṭa-durga-Mahāvīra-prāsāda-praśasti*, composed, in V. S. 1495, by Chāritra-ratna-gaṇi, and copied in V. S. 1508 at Devagiri, which appears to corroborate the conclusions I came to and published in my Progress Report for the year ending the 30th June 1904, *viz.*, that the tower was originally constructed about A.D. 1100, and was rebuilt or repaired in Rāṇā Kumbhà's time, about A.D. 1450. The manuscript, which reads much like a copy of some inscription then existing, speaks of a Jaina temple, seemingly dedicated to Mahāvīra, and a *Kīrtistambh* which stood before it, and likens the latter to the upraised hand of the temple. The temple, it states, was originally built to the north (of the Kīrtistambha) by one Chāchā, son of Tejā of the Ukeśa race, and it further informs us that the sons of Guṇarāja Sādhu carried out the work of repairing or rebuilding of the temple and installing new images, which was begun by their father in accordance with instructions received from King Mokaljī, in the year V. S. 1485 (A.D. 1428). It also states that the "blessed Kumārapāla" constructed this lofty structure (the Kīrtistambha) to the south of the temple, which eclipses the glory of Kailāsa.

H. C.

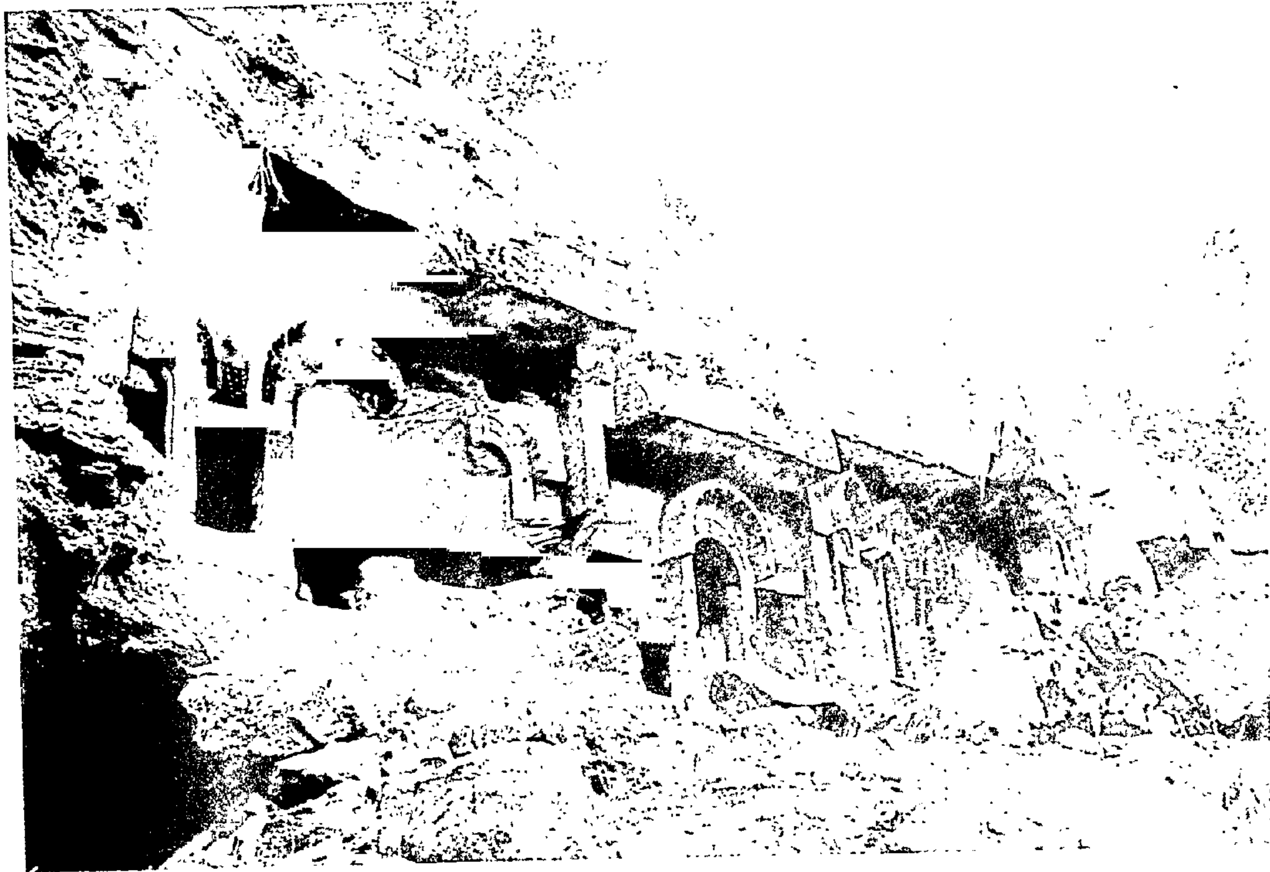
PROGRESS OF CONSERVATION IN MADRAS.

DESPITE the noticeable increase in the works of conservation which the liberality of the Madras Government, aided by subsidies from imperial sources, has rendered possible, there have been singularly few undertakings during the year of any special magnitude. For the most part, the operations have consisted of simple protective measures and minor repairs, and it has consequently been possible to spread the funds available over a much larger number of monuments than would otherwise have been possible. The actual number of monuments which have received attention during the year amounts to some eighty in all, and includes representatives of practically every style and every epoch of architecture in the Presidency.

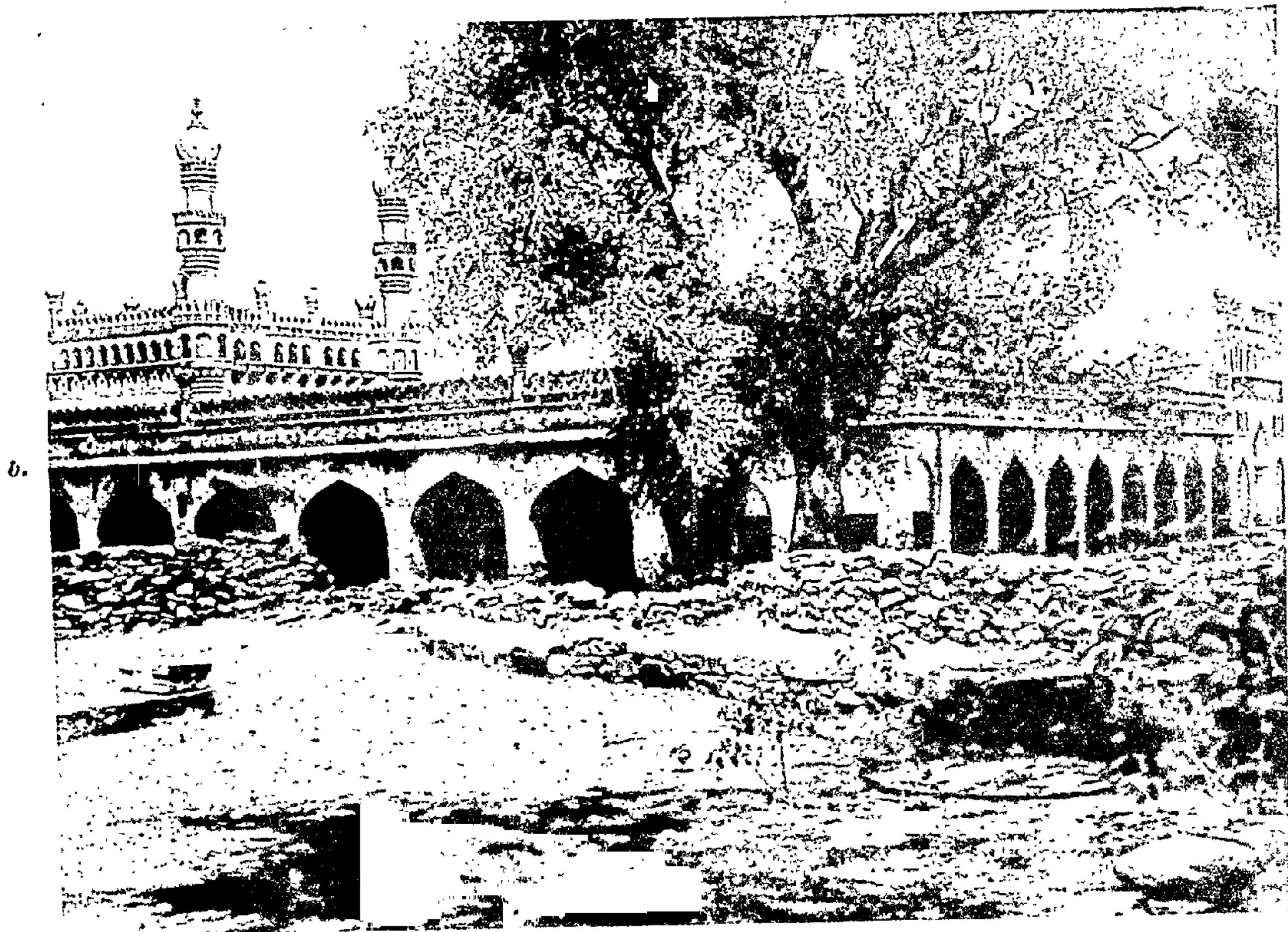
Among the earliest of these may be noticed the prehistoric site at Adittanallur, which has been excavated with such eminently good results in previous years, and which is now being preserved and protected under the Ancient Monuments' Act. Next in chronological order come the Buddhist remains at Jaggayyapēṭa and Amarāvatī, where steps have been taken for safeguarding the remains by erecting fences, and collecting and stacking together in order all the important stones. To the Buddhist epoch in Madras also belong the series of rock-cut caves at Guṇṭapalle, of which a group is shown in Plate XXI(*a*). They are, it will be noticed, of a particularly archaic type, of which no other examples are known to exist so far south in the Presidency. They were visited by Mr. Sewell many years ago and a note on them was contributed by him to the Royal Asiatic Society's Journal. A survey of them, too, was also carried out by the Archæological Department; but owing to circumstances over which I have had no control, the plans and illustrations have so far never been published, though a descriptive account of them is contained in the orders of the Local Government.

Besides these rock-cut monuments at Guṇṭapalle, there are extensive remains of structural edifices—*Chaityas*, *Stūpas*, etc. These were surveyed also at the same time, so far as it was possible, and some superficial excavations among them were carried out; but owing to difficulties raised by the owner of the land nothing on an extensive scale could be attempted. Since then, repeated efforts have been made to overcome his opposition, which, be it said, is quite unreasonable, but all without avail;

a.



b.



a. ROCK CUT CAVES AT GUNTAPALLE: GENERAL VIEW OF PRINCIPAL GROUP.
b. MOSQUE IN GANDIKOTA FORT.

and unless he can be induced to change his attitude, it will be necessary to acquire the site under the Land Acquisition Act. The measures of conservation, which have been carried out here, have consisted, in the main, in efforts to arrest the decay of the rock-carvings and in the removal of jungle from the structural remains.

Of the memorials belonging to the succeeding or Pallava epoch, the famous group of rock-cut shrines and structural edifices at Māmallāpuram—more popularly known as "The Seven Pagodas"—are the only ones that need claim our attention here. At this site, a thorough and systematic campaign of work has now been taken in hand, and one by one all the monuments are being overhauled and carefully preserved. By far the finest is the well-known Alēva temple, which stands out alone, a singularly imposing landmark, right on the sea-shore. What is left of it now, consists of a double-towered shrine with courts and subsidiary buildings that have been excavated on its inland or western side. The eastern courts of the temple have been washed over by the sea and nothing remains of them but some water-worn stones and the base of a *stambha*, which has been better preserved than the rest. The work of digging out the western courts of the temple was begun by me some years ago and has lately been resumed with many interesting results, which will be published when the excavations have been brought to completion. The work which concerns us here relates to the preservation of the two towers shown on Plate XXII (*a*). The joints of the masonry in the structures were sadly worn with the wind-driven sand and sea-spray, the crevices thus formed between the stones being as much as six inches wide; and it was merely a matter of time—and no great length of time—for the whole building to collapse. All the fissures have now been carefully filled with cement, well rammed home, and toned down to the colour of the adjacent stone-work, so that it is hardly noticeable to the casual observer. The manner in which this has been accomplished is peculiarly successful and speaks volumes for the care bestowed on the work by the Public Works Department. Indeed, there is no reason why the temple should not, with due care, and provided the sea is not allowed to encroach further, last in its present state for another millenium. This encroachment of the sea is a matter which will require especial watchfulness, for, as stated above, the waves have already overwhelmed the courts on the eastern side, and they threaten now to envelop the shrine itself unless their advance is effectually stopped. As a preliminary measure, two revetments have been built, one to the north and one to the south of the temple, and it is proposed further to carry out another breakwater to a distance of some six or more yards in front of the temple, to prevent the waters washing into the interior of the structure. Possibly, also it may be found practicable to run out a line of boulders north-east of the temple, so as to form a sand-bank, as has been done at the Madras harbour, and thus permanently shield this valuable monument from the violence of the sea.

Another monument of some interest at Māmallāpuram is that shown in Plate XXII (*b*) which has just been excavated from the sand. Until recently, only the topmost stone of the tower was visible, and it is a matter for some congratulation that the rest of the building has been found to be relatively so well preserved. There is nothing specially worthy of note about its plan or elevation from an archæological point of view; but its recovery makes a welcome addition to the little number of Pallava monuments, and affords another attraction among the sights of the Seven Pagodas. A few fallen

stones, it should be added, had to be replaced and some dilapidated parts of the walls to be rebuilt and grouted.

At the same site, a third building which has received attention is the pillared *Maṇḍapa* shown in fig. 1, which was built by one of the Vijāyanagar kings in front of some fine rock-carvings not, unfortunately, visible in the photograph. Here the fallen portions of the north and south walls have been re-erected to such degree as was necessary to ensure the stability of the structure, and the ground all round has been cleared of débris. The rock-carvings at the back of this hall are of peculiar value as being one of the earliest monuments of the Kṛṣṇa cult. Various scenes from the life of the god are portrayed, and a point about these sculptures which deserves particularly to be noticed is that although the figures carved on the rock are in an attitude of devotion, the object of their worship is not represented like them on the face

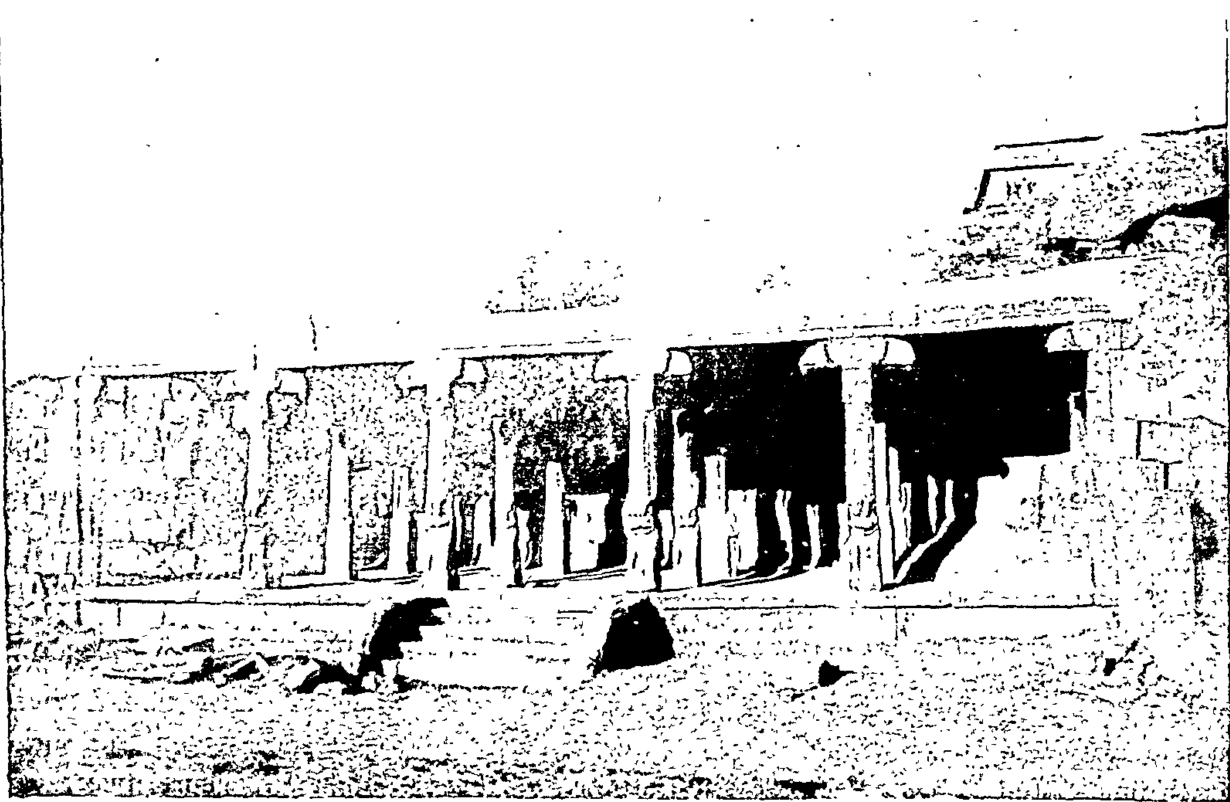
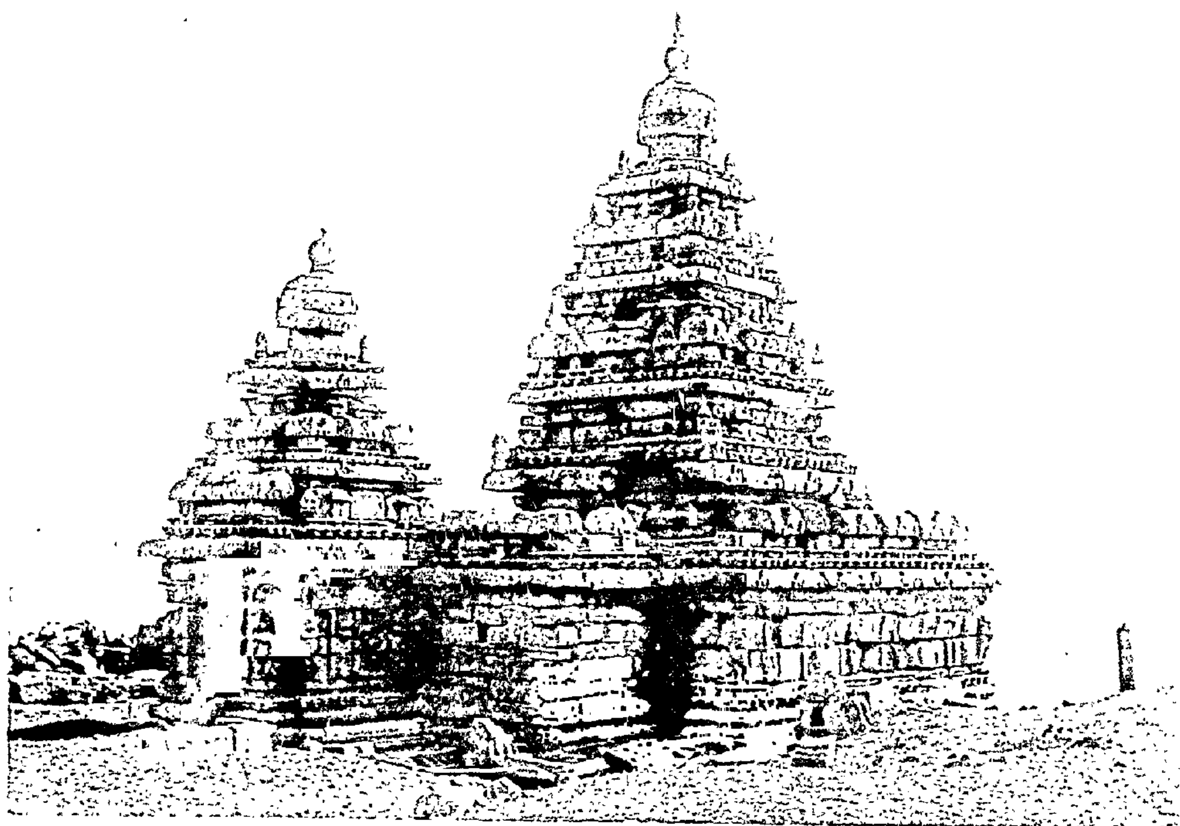


Fig. 1.

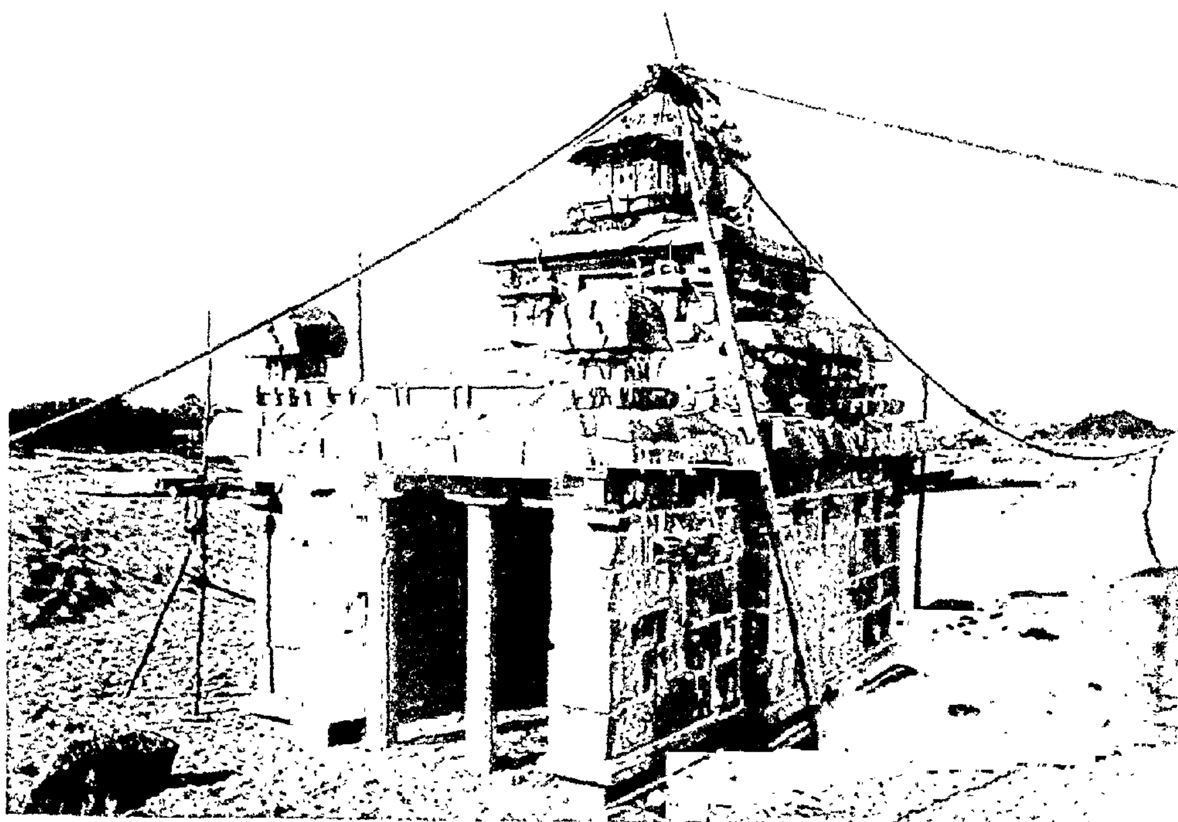
of the rock, but stood free 'in the round' in front of the reliefs at the point where there is still a hole in the floor of the hall. This appears to have been the case also at the so-called "Arjuna's Penance," where Fergusson believed that the Nāgas in the cleft of the rock were the objects of adoration. As a fact, it is plain that these Nāgas are themselves in an attitude of devotion, and there can be little doubt that the image which they are worshipping was set up in front of the rock, where it is quite possible that traces of it may yet be found when the ground is further excavated.

Coming to monuments of a later period, good progress has been made in the campaign of work among the remains at Hampi, which I have dealt with at some length in previous reports. Here the chief undertakings this year have consisted in repairing the roofs of various temples, constructing buttresses and masonry supports where necessary, clearing débris from the courts and interiors of some of the

CONSERVATION IN MADRAS.



b.



a. MAMALLAPURAM: S.-W. VIEW OF SHORE TEMPLE.
b. MAMALLAPURAM: N.-E. VIEW OF MUKUNDANAYAR TEMPLE.

buildings, and, lastly, in excavating a small site near the *Maharnavāmi dibba*, where a series of interesting vaults were laid bare.

Of a similar character also has been the work among several monuments in the Gaṇḍikota Fort, in the Cuddapah District, which have lately been systematically overhauled. They include two temples, a granary, a hall and a Muhammadan mosque, the last-mentioned of which, as will be seen from the photograph in Plate XXI (*b*), is a singularly fine specimen of Saracenic architecture, resembling somewhat in style the monuments of Bījāpur.[1]

Much, also, has been done during the last twelve months for the preservation of some of the famous hill fortresses of the Presidency, among which I may notice especially those at Udāyagiri, Chandragiri, Gaṇḍikōta, Sankaridrug, Tellichery and



Fig. 2.

Gingee. These, and many more fortresses like them in Madras, have a singular interest attaching to them, not only from the imposing character of their walls and the conspicuous positions which they generally occupy in the landscape, but also by reason of their historic associations and the important part which they have played in the destinies of the country. Many of them were the strongholds of resistance when the British forces were first occupying Madras, and the stubborn defence which they offered to our advance made their reduction inevitable. But even in these cases the damage done to their vast and massive structures was relatively small, while the fortresses which sided with the invading power were left intact. The preservation of these monuments offers few difficulties, as it is merely a matter of cutting down the dense vegetation which often covers the masonry and of repairing patches

[1] An account of the place appears in the *Journal of the Asiatic Society of Bengal*, XIV, 410.

here and there in the walls where they show signs of crumbling. The closing up of extensive breaches or the rebuilding of large gaps in the fortifications would be neither desirable nor practicable. The fort shown in fig. 2 is that of Udāyagiri in the Nellore District, which must always have been one of the chief military centres in the east coast. Though now partially ruined, it still constitutes a splendid example of defensive architecture, its situation being one of great natural strength, and the approaches to it having been constructed with consummate skill. Tradition says that it was originally built by Lōngūla Gajapati; and we hear also about certain Vaidya Kings and others who succeeded him. The first certain historical fact, how-

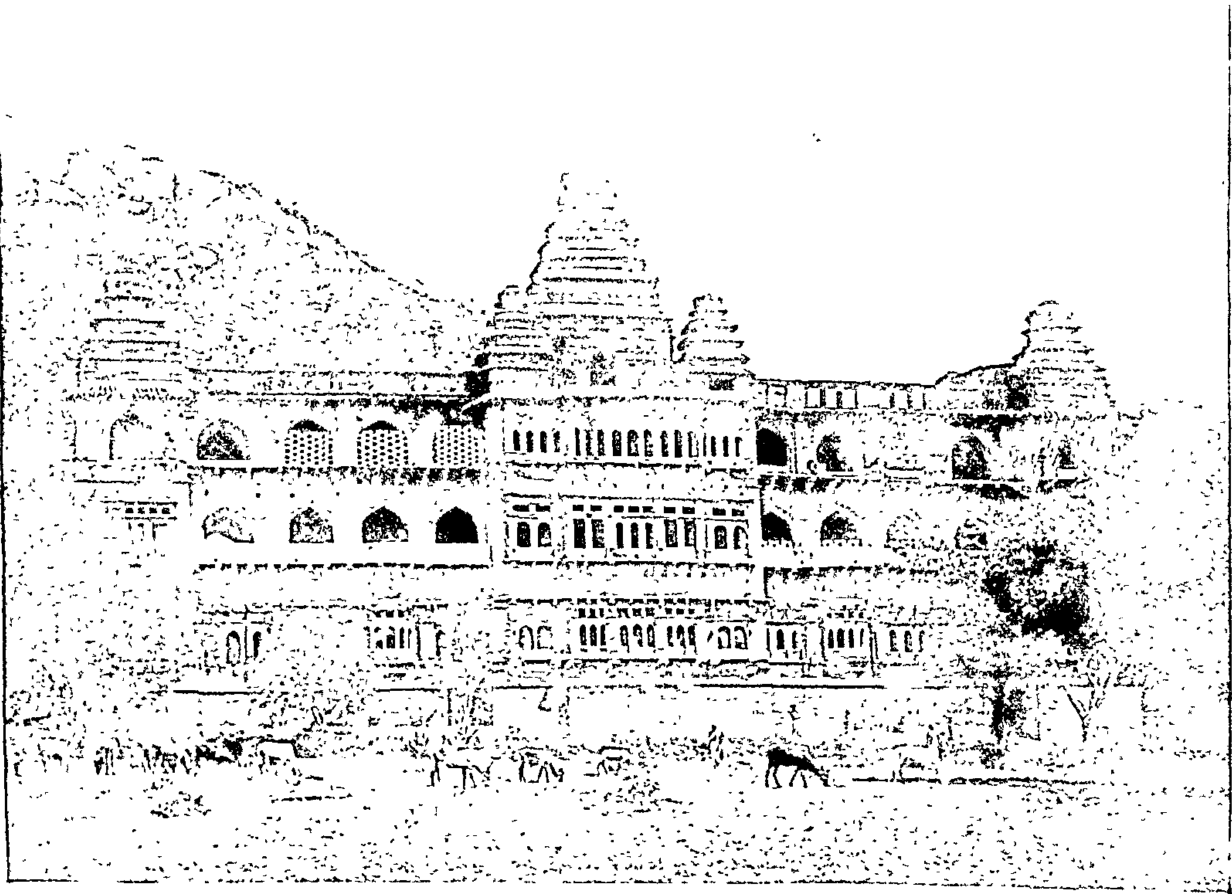


Fig. 3.

ever, that we know about it, is that it was captured by Kṛṣṇadēva Raya of Vijāyanagar in or about the year 1512 A.D. "The 'Vaidya Raja' is credited with having built the fort known as Bara Khilla, and thus with having strengthened the place, which was further strengthened by Mir Jumla, who built the Pattikoṇḍa fort. After some time the Muhammadan Government appointed Zūpalli Venkata Rāu to be Polegar of Udāyagiri; but he became recalcitrant and refused payment of tribute, on which he was attacked by the Nawāb of Arcot who defeated and slew him. Since then, the place remained under Musalman Governors till 1839, when it passed into the hands of the English."[1]

The fort at Chandragiri is by no means so interesting or so well-preserved as that last described. It is situated on a hill rising up some 600 feet, and its fortifications

[1] Sewell, *Lists of antiquities in Madras*, Vol. I, p. 141.

consist of two lines of circumvallation, which, however, are discontinued where the face of the rock becomes precipitous and unscalable. The early history of this fortress, like that of Udāyagiri, is wrapped in uncertainty and it is not until the 16th century, when it was captured by Kṛṣṇadēva Raya of Vijāyanagar, that we know anything definite concerning it. In 1592 A. D. King Venkatapathy retired here from Penukoṇḍa, and it was here in 1639 A. D., on March 1st, that Sri Ranga Raya of the Vijāyanagar dynasty signed the treaty with Mr. Day by which the site of the Presidency town of Madras was made over to the English. The actual building in which the treaty was signed is the Palace shown in fig. 3, which is situated on the level at the foot of the hill, and constitutes by far the most important and attractive monument at Chandragiri, and one of the best examples of late eclectic architecture in Madras. The lower part of the structure is built solidly of stone, the upper of brick with a little woodwork introduced. Mr. Chisholm considered it to be of late 17th or early 18th century construction ; and this view is probably correct. "The main building," he writes, "is about 150 feet long. It faces south, with an imposing and well-balanced façade of three storeys. The sky-line is pleasingly broken by Hindu terminations, like the tops of *gōpurams*, the largest surmounting the Durbar Hall. This apartment measures 21 feet square. It is surrounded by a colonnade, and rises through two storeys in such a way that the largest quantity of light comes through the upper tier of arches which thus forms a sort of clear storey. With the exception of the angles, which are comparatively solid, each floor consists of a pillared hall, the piers arched across both ways forming the supports for the flat domes which ceil the square space."[1]

It may be added as an item of some interest that the treaty referred to above was drawn up on a gold plate, which was preserved by the Company in Fort St. George until 1746, in which year the fort was handed over to the French. During the occupation of the French, between 1746 and 1749, the plate disappeared and has not since been traced. [2]

It remains, in conclusion, to say a few words about the quality of the conservation work generally throughout the Presidency. The success of conservation work must, of necessity, depend in a very large measure on the Public Works Department, and it is a matter for much congratulation that, as the campaign of conservation work has extended during the last few years, the interest taken in it by all officers concerned has grown more and more. But in the nature of things it is too much to expect that officers of the higher grades, whose time is occupied with manifold other duties, should supervise personally all the operations going on in their districts ; and on the other hand their subordinates seldom possess the discrimination and judgment called for in works of this kind. In Europe, there is an experienced clerk of works to look after undertakings of this kind—a man who knows exactly what is wanted and what is to be avoided, and who can carry out to a nicety the instructions given him. Here, in India, the supervisors are only too often anxious to put in conspicuous work, which will catch the eye of the inspecting officer ; and even if we find here and there one among them who has some sympathy for old work and has learnt the right

[1] Cf. *District Manual of North Arcot*, p. 324.

[2] Mrs. F. Penny, *Fort St George, Madras*, pp. 9 and 10.

methods of dealing with it, it generally happens that he goes on leave or is transferred elsewhere at the moment when his presence is most needed. What, undoubtedly, is wanted in the Presidency is a small and well-trained corps of supervisors, detailed for this work alone—men who can be deputed to one spot or another as occasion may require, and remain there undisturbed from the start to finish of the work. With such a body of men attached to the Public Works Department, there is no doubt that many difficulties that now beset us would vanish, while no extra expense need be involved in their establishment.

A. REA.

EXPLORATION AND RESEARCH.

IN the field of exploration, the work of the Archæological Department continues to focus mainly round early Buddhist sites. The operations at Sārnāth, which started with such promise under Mr. F. O. Oertel in the previous year, had, unfortunately, to be suspended for a season, owing to that officer's transfer to Agra; but elsewhere the campaign of excavation has been systematically pushed on and many valuable results have been achieved.

In the United Provinces, Dr. Vogel has continued his careful examination of the site at Kasiā, where, besides clearing almost completely the large monastery previously discovered, he has unearthed two other buildings of a similar character, the one adjacent to but of a much earlier date than the large monastery, the other to the east of the central mound. The first-mentioned one has proved of special interest. It consists of rows of cells built round two courtyards, with a square tank in the centre of each, the plan of the one to the east (L) being practically the same, though on a smaller scale, as that of the larger and later monastery (D). From the masses of burnt and charred wood which Dr. Vogel found within this building, it is evident that it was destroyed by fire. This accounts also for the relatively large number of minor objects discovered in the building, which we can hardly believe would have been left there unless the building had to be precipitately abandoned. These objects include a collection of metal vessels and other implements, besides a number of inscribed sealings and some terra cotta figures. The epigraphical evidence of the sealings is, in this case, of exceptional value, inasmuch as it fixes down the date of the destruction of the monastery approximately to the end of the fifth century A.D., and establishes at the same time the age of the utensils and articles of daily use which were found among the débris, thus greatly enhancing their value and adding appreciably to the scanty stock of material which we possess for the history of Indian metal-work.[1] As to the date when the monastery was built, there is not so much certainty at present, but Dr. Vogel conjectures with much probability that it dates back to the Kuṣaṇa epoch, to which also belongs the old plinth of the temple. The larger monastery (D) seems to have been built to replace the earlier one, and to be

[1] The Indian museums possess singularly few specimens of metal-work of which the date is even approximately known; and it is only systematic excavations that are likely to help us to fill up this blank. An analysis of the alloys of metals employed in the fifth century should prove of some interest

contemporary with the Nirvāṇa statue dedicated by the Abbot Haribala. Another discovery of importance made by Dr. Vogel has been that of the enclosing wall of the *saṅghārāma*, a solid brick structure some 5,000 feet in length, and enclosing an area of about 36 acres, shaped roughly like a rhombus. The buildings hitherto excavated occupy, as will be seen at a glance from the plan (Plate XXVI), but a very small fraction of this great enclosure. No doubt, others, extending over the whole area, still lie buried beneath the surrounding fields, but that it will ever prove worth while laying many more of them bare seems unlikely. The temple of the Dying Buddha certainly seems to have been the central point of interest in the *saṅghārāma*, and it is more than doubtful if the outlying buildings would yield enough to compensate us for the cost of their excavation. The question of the identity of this sacred site still remains open, though some evidence on the point may perhaps be deduced from the discovery of numerous seals, emanating from the monastery of the "Great Decease." These seals were presumably attached to letters, and it may be inferred, therefore, that Kasiā is not the spot where Buddha attained his *nirvāṇa*. On the other hand, it is certainly strange, as Dr. Vogel points out, that all these documents, except two, should have emanated from the same monastery. This difficulty may, however, be explained on the hypothesis that the monastery at Kasiā was affiliated to the larger monastery of the "Great Decease", and that the bulk of its correspondence was with that monastery. But whether such an hypothesis will prove to be correct or not, remains to be seen.

The claims of the site of ancient Rājagṛha to exploration were peculiarly strong—more so, perhaps, than those of any other spot of India. The mighty ruins of the older city of Kuśāgārapura, the capital and centre of the great Magadha kingdom, go back to an antiquity of which no other monuments are left to us in India. Of their actual date and of the builders who called them into being our knowledge is as yet a blank. We can but assign them vaguely to some uncertain age before the dawn of history, and rank them, as their stupendousness entitles them to be ranked, among the greatest wonders which primeval man has bequeathed to us. Side by side with this city, but later than it, it may be, by a thousand years or more, are the ruins of "New Rājagṛha"—new, that is, in the days of Buddha, but older than any remains that we know of in this country save those of Kuśāgārapura. The remote antiquity and the unique character of these two cities would of themselves more than suffice to allure any excavator to explore them, but these by no means constitute the only or, indeed, the greatest attractions of the site. It is to its intimate connection with the life of the Buddha and the events which immediately followed his death that the spot chiefly owes its fame, and it is in the sacred monuments of that and later epochs and in all their romantic and hallowed associations that its fascination chiefly resides.

To explore at all adequately this great expanse of country, covering as it does an area of many square miles and teeming with buried remains, would, needless to say, be a task of many years' duration, and at the best we can probably only look to occasional digging here and there, wherever the ground looks most promising, to reveal to us more of its history and to help us in the further identification of the many sacred memorials described by the Chinese pilgrims in the fifth and seventh centuries.

Of the discoveries made during the past season the most interesting, perhaps, is that of a cylindrical tower buried beneath a small and dilapidated Jaina shrine on a knoll in the midst of the older city. The tower, which is hollow in the middle, but without any opening to give access to the interior, appears to have been in the form of a *stūpa.* This explains the existence of a second concentric ring of brickwork, which was added around the original tower at some later date, just as we know that outer shells were frequently added in succeeding generations to Buddhist *stūpas.* But the strange and important feature of this particular monument is that it is not Buddhist at all; for its base is adorned in relief with figures of Nāgas, Gaṇeśa, Śiva, and a garlanded *liṅga*, which can leave no doubt as to its Hindu character. Perhaps, we shall not be far wrong in surmising that it was intended as a colossal *liṅga*, the form of which would be readily suggested by that of a *stūpa,* and in the phallic significance of which the *stūpa* may originally have shared. Be this, however, as it may, this monument is the first example of its kind, so far as I am aware, which has yet come to light, and the value attaching to it is, therefore, exceptional. The style of the sculptures, it may be added, is that of the Gupta epoch.

Another find of interest from the older city is the base of a statue of red Agra stone belonging to the Kuṣaṇa period, and very similar to the bases of two other statues found at Sārnāth and Saheṭh-Maheṭh, both of which appear to have been dedicated by the same donor. The surmise may perhaps be hazarded that the statue at Rājagṛha was another gift of the same man.

In New Rājagṛha, portions of the City wall with its semi-circular bastions were excavated, and trial pits and trenches were sunk at several points, in each case bringing to light the foundations of stone or brick structures. The character of these is as yet uncertain, though it may be surmised that some of the latter at any rate formed part of monastic establishments.[1]

A full description of these remains, as well as of two groups of Buddhist *stūpas* unearthed by Dr. Bloch and myself on the outskirts of the cities, will be found in a separate article published below. The relatively short time at our command as well as the paucity of workmen whom we could employ, unfortunately prevented us from attempting excavations for prehistoric antiquities, and even from following up the later remains as thoroughly or systematically as we could have wished, but what has been done has sufficed to show that a rich harvest of discoveries may be looked for with a more extended campaign of work. Pari passu with the digging operations, a careful survey was also made of the site, extending over an area of some 35 square miles, and including in it both the old and new cities as well as the two long ranges of hills as far east as Giriak. The valley towards Yaṣṭi-vana has yet to be mapped out, but in the meantime the topographical survey, so far as it has gone, has proved of great help in settling many doubtful points connected with the topography of the two cities and particularly in the identification of various landmarks described by the Chinese pilgrims, among the more important of which may be mentioned the renowned Sattapaṇṇī Hall, where the first Buddhist synod was reputed to have been held, and the Bamboo Garden in which the Teacher spent much of his time at Rājagṛha.

[1] In cases where brick and stone foundations were discovered in close juxtaposition, the latter were invariably in a lower stratum and therefore earlier than the former, and an intermediary stage was found in which the bricks were combined with stone.

In the Madras Presidency, Mr. Rea has been taking up again the excavations at the well-known site of Amarāvatī, which has never yet been thoroughly examined, notwithstanding that all the sculptures from the great central *stūpa* have long since found their way to the Madras and British Museums, and that all trace of the *stūpa* itself has gone. It had apparently been assumed by previous excavators that the ground-level outside the paved *pradakṣiṇa* or ambulatory was the same as that of the *pradakṣiṇa* itself, but it now turns out to be some three to five feet below the latter, and the removal of the accumulated earth and débris from above the old level has brought to light a fine collection of carvings, inscriptions, and other antiquities. In front also of two of the approaches to the *stūpa*, *viz.*: those on the south and east sides, Mr. Rea has unearthed a number of valuable remains in the shape of marble statues, rails, brick structures and—most striking of all—a beautiful little *stūpa*, eleven feet in diameter and adorned with ten finely sculptured marble slabs, every whit as fine in design and technique as those from the great central *stūpa*. Some of the stone railings are of singular value, as proving by the date of the records incised upon them as well as by the characteristic manner in which they are chiselled, that the main *stūpa*, or whatever the monument that they encircled may have been, dated back to the Mauryan period. To the same period also belonged a lapis-lazuli intaglio found in the same stratum with the rails. The device on this gem is a lion rampant with a *svastika* above the raised foreleg and the owner's name below.[1] Among the other minor antiquities unearthed by Mr. Rea may be noticed a number of iron implements, bronze and pottery lamps, and some articles of carved ivory.

Of the excavations of the mediæval Jaina shrines at Dānavulapāḍ and on the ancient village site at Peḍḍamuḍiyam it is unnecessary for me to say anything here. Mr. Rea's two short articles relating to them, which appear below, were meant for inclusion in the Annual for 1904-05, in which year the works referred to were carried out, but at the last moment their publication had to be postponed owing to a mishap to some of the illustrations accompanying them. The same remark applies also to Mr. Taw Sein Ko's description of the opening of two small pagodas at Pagan in Burma. In connexion with this latter contribution, it will be seen from the footnotes attached to it that I am unable to share Mr. Taw Sein Ko's views as to the identification of several of the reliefs discovered by him, or to agree with him in the deductions which he draws from them.

J. H. MARSHALL.

[1] Cf. for the inscriptions. Dr. Konow's remarks on p. 166 below.

EXCAVATIONS AT KASIĀ.

AN account of the Kasiā excavations carried on in 1904-05 has appeared in the previous Annual Report of the Archæological Survey.[1] Though inconclusive as to the great question of the identity of Kasiā with Kusinārā, the operations of that year had fully established the importance of the site and antiquity of its remains. I therefore recommended that they should be continued in the following cold season. My proposal met with the approval of the Local Government; and a sum of R1,400 was sanctioned for the purpose. It was intended that the bulk of this amount should be spent on completing the exploration of the main site known as Māthā Kũar kā Kōṭ, whilst R300 were set apart for trial excavations at the minor sites near Kasiā. In view of the important results obtained, an additional sum of R400 was applied for and sanctioned in the course of the work. Of the total amount of R1,800 thus allotted, R1,799-8-11 were spent. The excavations lasted from the middle of January till the end of March 1906. The number of labourers employed varied from one to two hundred. In the supervision of the workmen intelligent assistance was rendered by my clerk Babu G. D. Mehta, who also kept an accurate register of the objects discovered. In the course of the work ten drawings were prepared and nineteen photos taken by my two draftsmen and photographer. They have been partly used to illustrate the present paper, the rest being reserved for a separate publication which I hope to devote to the Kasiā excavations, when completed.

I.—MONUMENTS.

A.—Monastery D.

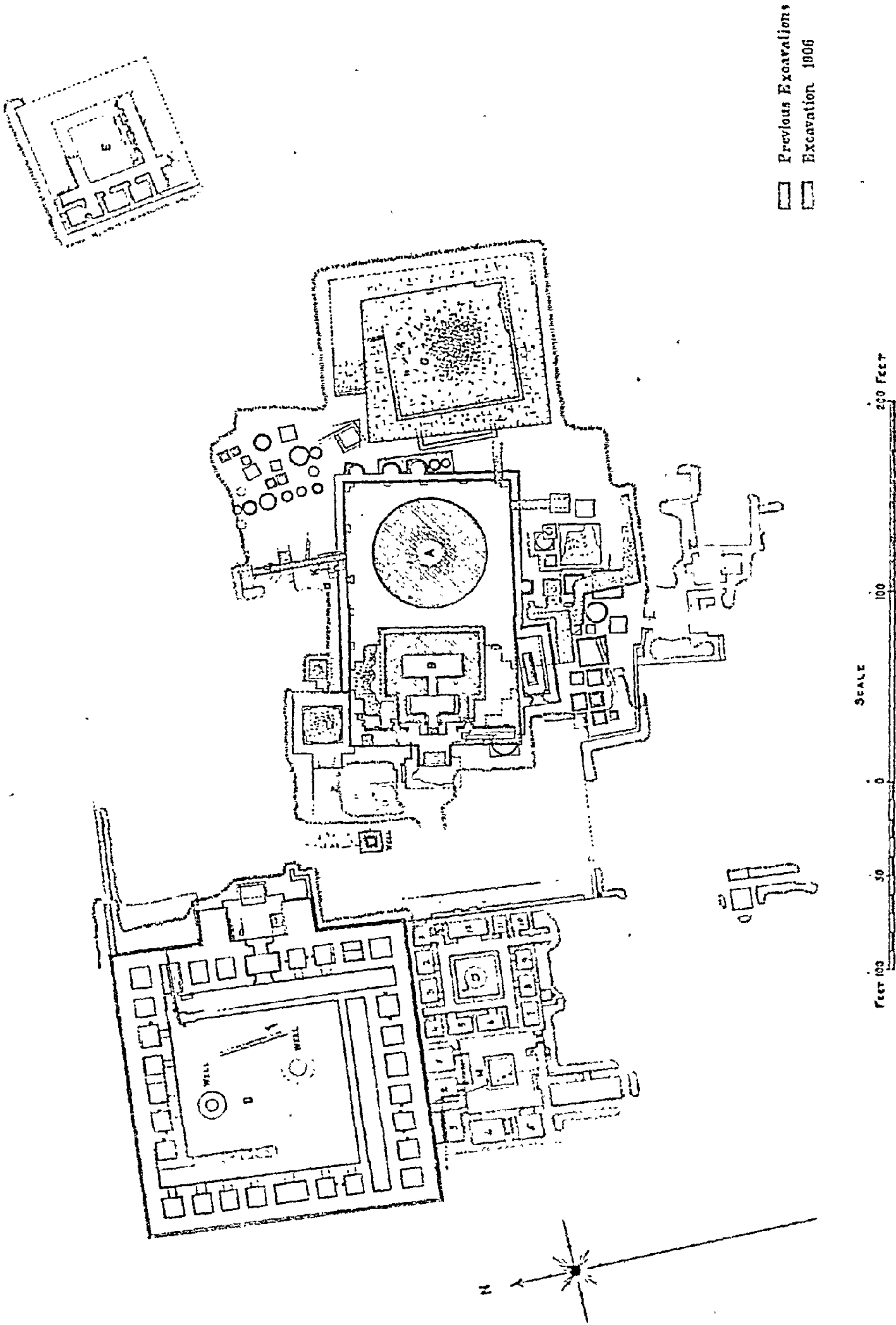
The monument last noted in my previous paper is the large monastery D which occupies the north-western portion of the Māthā Kũar kā Kōṭ. It contains a central courtyard 74′ square, enclosed by corridors 9′ to 10′ wide, along which the four rows of cells, slightly varying in size, are arranged. In continuing the excavation of this imposing building, several of the cells, together with the corridors and northern half of the courtyard, were cleared down to the original floor-level. In the cells and corridors this level is clearly marked by concrete floors, whereas the whole of the courtyard is paved with brick tiles measuring 14″×8″×2½″ and 15½″ × 9″×2½″. The walls which now separate the courtyard from the passages are

[1] *A. S. R.*, 1904-05, pp. 43ff.

evidently of later construction. This is especially clear in the case of the eastern wall, the foot of which in its centre is 3′ 3″ above the original floor-level. On the west side only a low wall of very rough masonry remains, whereas along the north side no wall now exists. The former existence of a passage on this side also is, however, proved both by a concrete floor, 10′ wide, and by a foundation wall, 4′3″ wide, which separates it from the courtyard. On the other three sides also the later walls rest on ancient foundations which show that the passages were part of the original plan of the building. The original arrangement must have been somewhat different from that presented by the existing later walls. The foundation walls form a square enclosing the courtyard on its four sides, and thus leave a free passage between it and the cells. The later walls, on the other hand, resting on the old foundation are each continued on one side. Apart from the evidence of the foundation walls, it is clear that this cannot have been the original arrangement, as it fails to provide a communication between the corridors mutually, as well as between the corridors and the courtyard. It is highly probable that the foundation wall enclosing the courtyard originally bore not a solid wall, but either a wall pierced by archways corresponding with the doors of the cells or more probably by a succession of masonry pillars or wooden posts forming an open verandah in front.

The wall, which separates the northern row of cells from the adjoining passage, stands to a height of 9′ at its western end. At its foot some iron nails $3\frac{1}{2}$″ in length were found. The wall shows very plainly the outline of the doorways which originally gave access to the cells and afterwards were bricked up in the manner described in my previous paper. From the original floor-level the doorways are filled with débris for varying heights, in one case up to 4′. For the rest, they are closed with regular masonry. On the top of the old walls, some 6′ above the level of the courtyard, remains of later walls are found. As pointed out, this arrangement is evidently due to a re-occupation of the building or—it is perhaps more correct to say—to the erection of a new building on the ruins of the old one. There is other evidence to the same effect. In the northern portion of the courtyard a circular well of very solid construction came to light, measuring 5′ 8″ in diameter and enclosed within a ring of masonry, 4′ 2″ thick, slightly raised above the level of the courtyard. This well, filled with earth and broken bricks up to the rim, was cleared to a depth of 10′ when the ground-water appeared. In the southern half of the courtyard a second circular well was discovered, measuring 8′ 6″ in diameter and starting from a considerably higher level. Its top is 7′ above the pavement of the courtyard and reached up to the surface of the mound. On the north side the masonry is broken away. It was cleared to a depth of 8′. It is manifest that this second well dates from the second period of occupation when the original well had become buried under débris.

In clearing the older of the two wells we found, at a depth of 6′, an inscribed clay seal and, at 9′ 6″, a fragment of a carved brick. The seal, judging from the character, must belong to about A.D. 900. Among the débris covering the courtyard, not far from the same well and at a distance of 30′ from the northern row of cells and at a depth of 4′ to 6′ from the surface of the mound, were found a great number of earthen lamps and inscribed clay seals. The latter will be fully discussed subsequently. Here I wish only to note that their dates range between A.D. 700 and 900, which


KASIA EXCAVATIONS
GENERAL PLAN
Previous Excavations
Excavation 1906
SCALE
FEET 100
50
0
100
200 FEET
WELL
WELL
WELL
A
B
C
D
E
N

therefore must be the final period during which the building was inhabited. The date of its foundation may, of course, lie a great deal further back. That it was deserted about A.D. 900, may be safely assumed on the strength of the evidence furnished by the clay seals. It is more difficult to fix the date when it was re-occupied. The extant remains leave no doubt that the original building had then become a complete ruin. The solid walls still stood in places up to a height of 6′, but their upper portions together with the roofs and even the doorways had collapsed, their débris filling cells, corridors and courtyard. It must have taken a considerable time before the building, which in the 9th century was still inhabited, became thus completely ruined. We may, therefore, assume that it was not before A.D. 1000 that the site was selected for a new building which was raised on the old walls. The ruins of the old edifice thus became the foundation of the new one.

It is a curious circumstance that of this later building far less now remains than of the original edifice. The explanation is that, at a time when the site had become finally deserted and was no longer protected by its sanctity, the later building must have been demolished for the sake of its materials, whereas the remains of the original edifice were completely buried and therefore not readily accessible. From the little that remains of the second building it would seem that it was similar in plan to the old one. This indeed would follow from the fact that it was raised on the walls of the other. In general, the later walls can be easily distinguished by their inferior construction. It is also a circumstance worth noticing that in the later masonry carved bricks have been inserted, which evidently had been taken from the ruins of some earlier buildings. Some of these bricks are of the same pattern as those found in the cornice of the early *stūpa* plinth. These carved bricks may be seen in the upper portion of the main walls, in the masonry of the bricked-up doorways and in the corridor walls which, as we saw above, likewise belong to the second period of occupation.

The above conclusions are confirmed by an examination of the entrance of the building under discussion. In my previous paper I noted the existence of two solid blocks of masonry projecting from the east wall and probably representing the bases of turrets which once flanked the main entrance and formed a porch in front of the gate. The space between these projections was now filled with a mass of bricks encased within a low wall and sloping up to the entrance of the later building. Here on the top of the outer wall the place of the doorway was still traceable and the entrance chamber floored with concrete almost at a level with the surface of the mound. But 9′ below this later concrete floor the original floor was found corresponding in level with the pavement of the courtyard. The entrance room measures 17′ by 10′ and is provided with a lamp niche in its south wall. In excavating it, lumps of charcoal and iron were found, which must have belonged to the doors. By clearing part of the débris between the two turrets the original entrance was laid bare. It then became manifest that the room was originally entered from outside by a gateway 13′ 6″ wide outside (east) and 6′ 8″ inside (west). The second doorway leading from the entrance room into the eastern corridor or verandah adjoining the central courtyard was found to be 8′ 7″ wide inside (east) and 9′ 10″ outside (west). Both doorways were entirely filled with débris

on which the walls of the upper building had been raised. I cut through this débris along the north side and had narrow arched passages made in both doorways so that access to the courtyard can again be obtained in the original fashion. At the same time I had two buttresses erected against the east wall near the northern projection.

Here I may also note the existence of a drain which runs from the north-east corner of the courtyard, follows the eastern extremity of the northern corridor and finally pierces the eastern outer wall. At a distance of 23′ 6″ from the outer surface of this wall it is arched over. It is noteworthy that the arch is a true one *built of radiating bricks, some of which project so as to break joint. From the* position of the drain, 6′ 6″ above the original floor-level, it is evident that it belongs to the later building. It was laid bare by Mr. Carlleyle and is shown on his plan.[1] If this plan is correct, the later building must have been practically identical in plan with the original edifice.

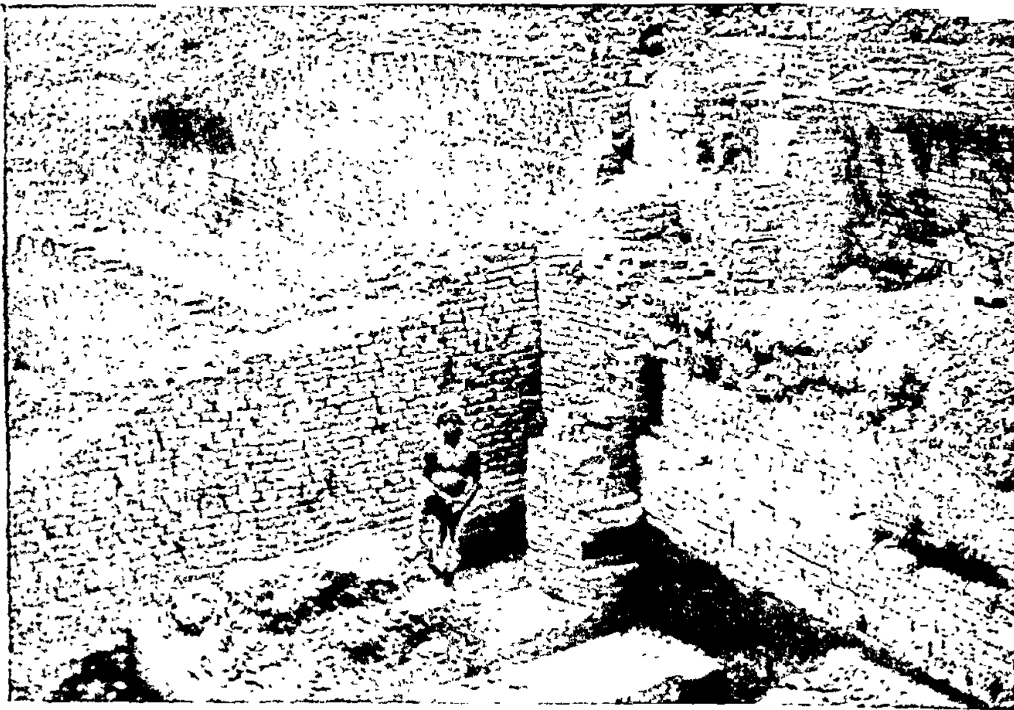


Fig. 1.

B.—Wall connecting (?) A and D ; shrines K and G.

From the north-eastern corner of the monastery D there runs a heavy brick wall, 3′ 1″ wide, in an easterly direction. At its starting-point, where it strikes the east wall of the monastery, it stands to a height of 6′ 3″, but gradually its height decreases. A considerable portion, at a distance of 26′ to 40″ from the corner of monastery D, has fallen southwards; only a few layers of bricks remain and at a distance of 81′ from its starting-point it altogether ceases. In the corner formed by this wall and the east wall of monastery D there is a mound which is marked on Mr. Carlleyle's general plan of the site.[2] Apparently this mound does not contain any building, but

[1] *A. S. R.*, Vol. XVIII, p. 70, and Vol. XXII, Plate III.
[2] *A. S. R.*, Vol. XXII, Plate III.

is merely due to the accumulation of refuse from the monastery. This is evident from the fact that besides broken pottery it yielded a large number of inscribed clay seals, partly identical with those found in the courtyard. Some specimens were discovered at the foot of the heavy brick wall to the south, but none on its northern side, from which it follows that they were thrown down there at a date subsequent to its erection.

Here it should be noted that from the great *stūpa* plinth there runs a wall northwards starting from a point opposite the centre of the Nirvāṇa *stūpa* (see fig. 1). It is 3′ 4″ in width and 6′ 6″ high at its junction with the *stūpa* plinth, but slopes down and breaks off at a distance of 43′ from the plinth. Mr. Carlleyle was much puzzled by this wall "leading out to nothing." It will, however, be seen from Plate XI that, if this wall and the one running to the east from the north-east corner of the monastery are produced, they will strike each other at right angles. The width and maximum height of these two walls closely agree. They are both built of bricks of different sizes, badly joined and comprising a few carved specimens obtained from the spoils of some earlier monument. We are led to the conclusion that these two walls were originally one and served the purpose of an enclosure to the inner group of monuments.

This conclusion, if correct, has a distinct bearing on the relative date of the main monuments. On the one hand, it is evident that the wall starting from the north-east corner of the monastery presupposes the existence of this edifice. On the other hand, the wall running northward from the *stūpa* plinth must have been built before that plinth received its present shape. This I infer from the following fact. The upper portion of the original plinth with its alternating pilasters and Buddha niches, as pointed out in my previous paper, is enclosed in a later encasement, which must have been constructed before the temple with recessed corners was built. Except on the west side, the outer surface of that portion of the plinth had already completely fallen away at the time when it became thus encased. Only one portion is still preserved and, moreover, exposed to view. This preserved portion is found immediately above the spot where the wall in question strikes the plinth. Its width corresponds with that of the wall. We may therefore conclude that the wall, which must have lost some of its original height, once covered this portion of the old plinth and in this manner preserved it. This explains at the same time the break in the outer casing which here leaves the surface of the original plinth exposed. In case, therefore, I am right in assuming the two walls originally to have been one, we may conclude that the *stūpa* plinth was encased at a date posterior to the foundation of the large monastery D. It would also follow that the temple with the recessed corners, raised on the enlarged plinth, must be later than the said monastery.

I may note here that in the corner formed by the wall in question and the *stūpa* plinth Mr. Carlleyle's plan shows an angular piece of wall engaged in the lower projecting portion of the plinth. Mr. Carlleyle took it for "the remains of an ancient flight of stairs which apparently turned half-way down at right angles, and which probably originally led up to the top of the plinth." Last year's excavations have solved the problem in a somewhat different sense. In reality, the supposed "flight of stairs" makes part of the wall of a small rectangular shrine (marked K on the

accompanying plan) which is partly engaged in the *stūpa* plinth, and therefore must belong to an earlier period. It measures 10′ by 12′ outside and contains one chamber, which is approached from the west by two steps and entered through a doorway 2′ 2″ wide. The walls, which are 2′ thick, are only preserved as far as they are engaged and here show a moulding very similar to that of the projecting portion of the early *stūpa* plinth. It is interesting to note that the orientation of shrine K is the same as that of the other buildings engaged in the plinth which have been described in my previous paper. It will be seen from the plan that the heavy brick wall which, if my supposition is correct, connected the *stūpa* plinth with monastery D, is built on the ruins of shrine K. We obtain therefore the following chronological order 1° shrine K, 2° early *stūpa* plinth, 3° connecting wall, 4° encasement *stūpa* plinth.

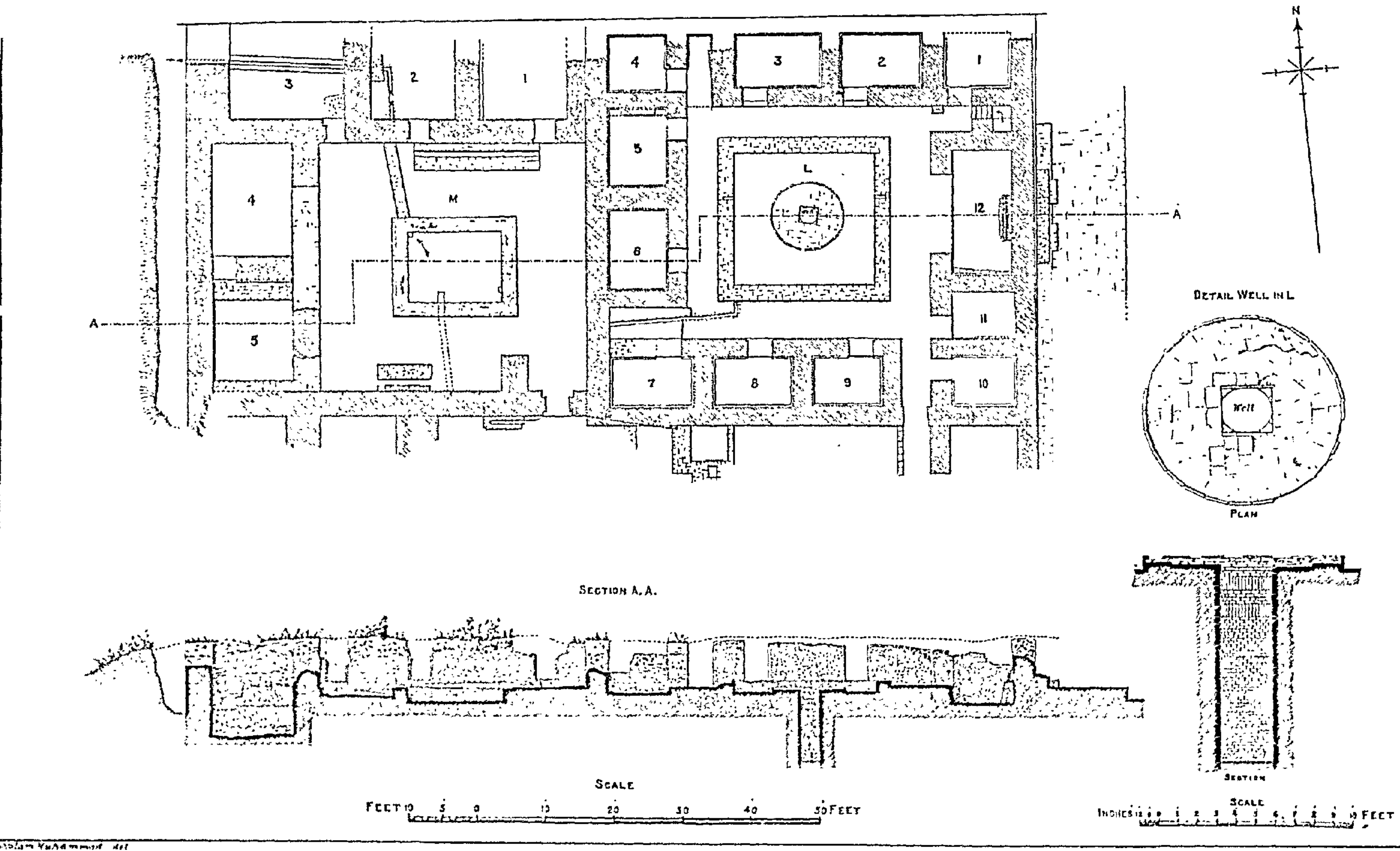
Further north the connecting wall is laid over the ruins of a second building, the south wall of which is at a distance of 21′ from the early plinth of the main *stūpa* A. This second building which I call G[1] is evidently the basement of another shrine larger in size than K and situated at the same level. We may, therefore, assume these two buildings to be nearly contemporaneous. On the east side, shrine G is completely broken away, but the body of the building which measures 26′ 5″ from south to north must originally have been square measuring 26′ 5″ in both directions, as may be inferred from its containing a room 14′ 5″ square. On the west side is added a projection of 4′ 9″ in width, the central portion of which consists of three steps leading up to the entrance of the building. Though there is no trace left of a doorway, it is clear that building G, like the smaller shrine K, faces west. The orientation of both is the same. The west wall of G is 6′ 4″ in width and stands to a height of 3′ over the floor-level. The north and south walls are both 6′ wide. Their height is 1′ 2″ and 1′ 5″ respectively inside, and 2′ 10″ and 2′ 5″ respectively outside. The east wall, as stated above, is missing. It is noteworthy that the outer half of the northern wall is evidently added so that this wall must originally have had only half its present width. The bricks of which the walls are built measure 11½″ × 7½″ × 2″ and 11″ × 8″ × 2″. The inner chamber is provided with a floor of concrete laid on three layers of bricks, but in the centre a square of about 7′ is left unplastered.

In the corner formed by the *stūpa* plinth and the wall a considerable number of carved bricks of large size were found which seem to have belonged to a string-course, together with fragments of image-pots and terra-cottas.

C.—Monastery L-M.

The south-western portion of the Māthā Kūar kā Kōṭ had hitherto remained wholly unexplored. Thirty years ago Mr. Carlleyle had erected a bungalow near the south-west corner of the *stūpa* plinth, and a little further west caused a house to be built for the Brāhman who united the functions of temple-priest and watchman.[2] The high ground south of the monastery D was mostly taken up by a fruit garden belonging to the Brāhman's house. After both this building and the bungalow had

[1] It is only partially shown on Plate XXIII.
[2] Cf. *A. S. R.*, 1904-05, Plate VI.
To the Brāhman watchman R100 were paid as compensation for the loss of his house.


KASIA EXCAVATIONS
MONASTERY L.M
N
A
A
L
M
DETAIL WELL IN L
Well
PLAN
SECTION
SECTION A.A.
SCALE
FEET 10 5 0 10 20 30 40 50 FEET
SCALE
INCHES 12 6 0 1 2 3 4 5 6 7 8 9 10 FEET

been dismantled, it became evident that they had been raised over remains of ancient monuments not less important than those already unearthed.

Adjoining the large monastery D to the south were found the ruins of another convent different in plan and earlier in date. The south wall of D partly rests on the north wall of this building, a circumstance which leaves no doubt as to their relative age. The portion excavated consists of two distinct buildings (marked L and M on the accompanying plan, Plate XXIV), each containing a square courtyard enclosed within rows of chambers. The remains of this monastic establishment are continued further southward; but their extent in this direction has not yet been ascertained. At a distance of some 100′ from the south-east corner of L a cell was excavated measuring 10′ 9″ by 11′ 2″, which, judging from its position, must belong to the same block of buildings. It would seem indeed that this earlier monastery covers an area not smaller than that of the later convent D described above, and that its southern portion extends beyond the boundaries of the mound.

It is interesting to note that the main entrance of L-M is right opposite the flight of steps leading up to the temple of the dying Buddha. We know that generally the *saṅghārāma* used to be built in the same axis with the *stūpa* to which it belongs.[1] The position of L-M with reference to the central group (A-B) would therefore suffice to prove that it represents the original monastery and that D was built subsequently. We notice, moreover, that the orientation of L-M is that of the earliest group of monuments now represented by those shrines (F and K) and *stūpas* (Nos. 1-7) which are engaged in the great *stūpa* plinth and must once have surrounded some central monument which has disappeared. It is also clear now that the orientation of D was conditioned by that of L-M, and that therefore, though it has the orientation of the earlier monuments, there is no reason on that account to reckon it among them.

When we compare the plan of L with that of D, it is evident that, apart from their difference in size, the general arrangement of these buildings is practically identical. In both cases the cells are built on the four sides of a square courtyard. In the case of D we have seven cells in each row making a total of twenty-eight, whereas in the case of L there are only three cells in each row making a total of twelve. It will be seen that, notwithstanding the larger proportion of the later building, the space allotted to each monk has remained unchanged. The only difference is that in D the rooms are nearly square, whereas in L they are mostly rectangular. In both cases, however, their size and shape vary. It is interesting that in L also the entrance room (No. 12) is much larger than the others, its dimensions being 19′ 8″ by 8′ 8.″ The adjoining room (No. 11), on the contrary, is the smallest of all. The corner room (No. 10) is nearly square, which is also the case with the corner rooms of the western and northern rows. All the rooms have a *pakkā* concrete floor except the south-west corner-room (No. 10) in which the remains of an earlier building were found, built into the foundation below the floor-level and 10′ below the surface of the mound. The entrance room (No. 12) contains a *kachchā* concrete floor at the same level with the floor of the passages and other rooms, and 7′ below the surface of the mound; but 3′ 6″ lower down a *pakkā* floor of concrete was found.

[1] *Cf.* A. Foucher. *L'art gréco-bouddhique du Gandhāra*, Vol. I, p. 154.

The existence of a double floor in this room seems to point to two periods of occupation for this monastery also. As in the case of D, we find here also the original entrance which was 12′ 5″ in width roughly closed with masonry, and a later wall built over it. The entrance room has also this peculiarity that it communicates with the courtyard not by means of a doorway as in the case of the smaller cells, but through a passage 12′ 5″ wide.

It will be seen that inside the courtyard there is a square of 20′ 8″ enclosed by low walls (height 1′) which leave along its four sides passages 4′ to 5′ in width, likewise plastered with concrete. The level of the passages is 1′ 4″ above that of the rooms. Each of these passages is prolonged on one end as far as the outer walls, so as to form four closets which separate the four rows of cells. Their *raison d'être* is obvious. But for these closets, the corner-cells would have been without communication with the courtyard. Thus L represents the same arrangement which, as shown above, must originally have existed in D also. The accompanying plan shows that in some cases these closets could serve some other purpose in addition to the one just mentioned. The southern one (between rooms 9 and 10) supplies a communication with the adjoining building which still remains to be excavated. The eastern one, besides providing the corner-room No. 1 with an entrance, contains a staircase which once led up either to a second storey or to the roof. The latter alternative is the more probable, for the walls which possess only half the width of the outer walls of D can hardly have carried a second storey. That the building was covered with a flat terraced roof may be inferred from the occurrence of large lumps of concrete found among the débris within its walls. These lumps still exhibit a flat surface on one side. On some of them the reverse side shows depressions which seem to be the marks of the beams on which the roof rested.[1]

I may note here that in these ruins masses of charcoal were found, presumably the remnants of beams and door-frames, but too indistinct and shapeless to allow of identification. They formed a layer about 1′ thick immediately over the original floor of the building. Next came a stratum 2′ high, consisting of lumps of concrete and fallen bricks Over this was spread a 3′ thick layer of pot-sherds, whilst the uppermost layer of 2′ consisted again of earth mixed with broken bricks. The total height of the débris above the floor-level amounted, therefore, to 8′. It will be evident from the above that the two lower layers represent remains of the actual building, whereas the two upper ones are due to subsequent accumulation. It deserves special mention that on the raised border of the inner square of the courtyard charred beams—said to be of *sāl* wood—could be distinguished. They were placed there in such a manner that they could not possibly be taken for beams which had collapsed at the same time as the edifice, but plainly were found in their original position. The only explanation I can offer of the existence of these beams and of the low walls on which they are placed is that they supported the posts of a verandah which ran round the four sides of the courtyard. Here I may refer to two miniatures of a Nepalese manuscript (presumably of A.D. 1015) both of which show a portion of a Buddhist

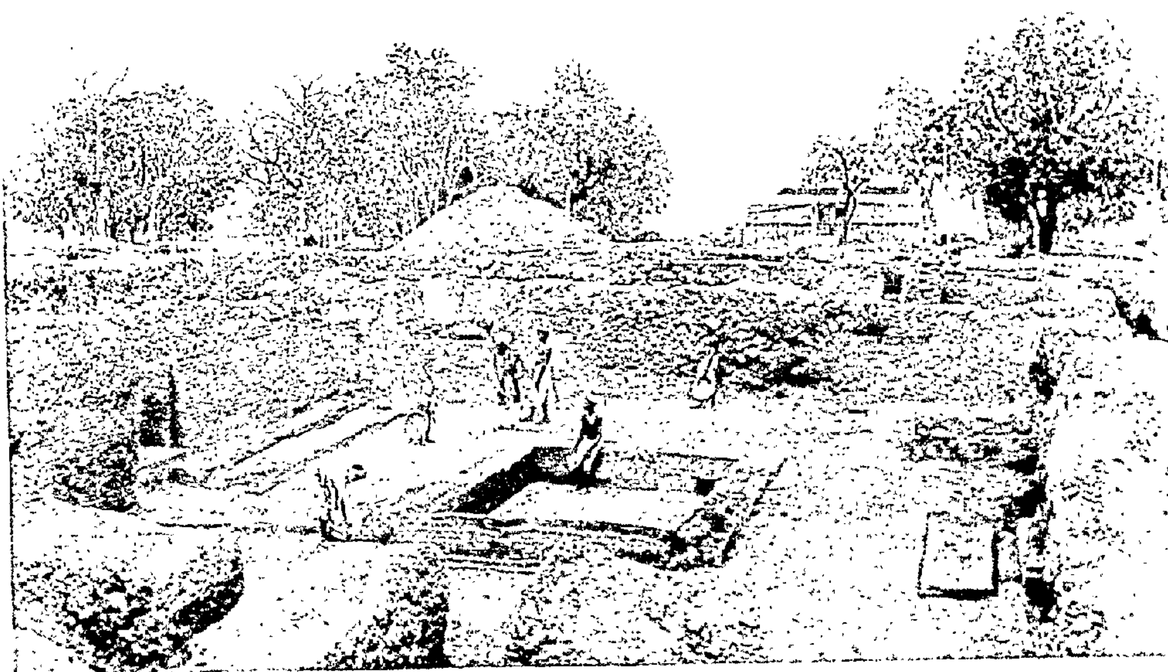
[1] In one of the Sārnāth monasteries Cunningham found "what appeared to be pieces of terraced roofing." *A. S. R.*, Vol. I, p. 121.

EXCAVATIONS AT KASIA.

a.



b.



a. MONASTERY L (FROM NORTH-EAST).
b. MONASTERY M (FROM WEST).

convent provided with a verandah under which a red-robed monk is seated. On one of the two pictures, which represents the convent of Rāḍhya, the carved wooden posts of the verandah not only support a beam of the same material, but seem to rest also on woodwork placed on a low masonry wall. I may note in passing that the monasteries pictured in the manuscript are both covered with a flat roof.

The centre of the courtyard is marked by a well 2′ 8″ square at its top surrounded by a low circular platform 10′ 3″ in diameter. Its construction is shown on Plate XXIV. It was cleared to a depth of 22′ (10′ below water-level) and was found to contain pot-sherds and broken bricks. I may note here that in this well, at a depth of 5′ 6″ from the top, we found one of the three Gupta seals to be discussed in the sequel. Another specimen of the same seal with partly effaced inscription and traces of burning came to light in the closet between cells Nos. 3 and 4. In the same closet a terra-cotta tube was found, broken in two pieces, together with sixteen rough balls[1] of baked clay. Such balls—I may note in passing—turned up in great number at various places in the course of excavations.

Within the square enclosed by the low walls of the courtyard opposite room L 7 a terra-cotta was discovered apparently representing a row of standing Garuḍas (fig. 2). The head of one of the birds was found inside the well. A single Garuḍa of terra-cotta came to light in the closet between rooms 9 and 10. Of other finds made in the building under discussion I wish to mention a globular incense-burner of brass with a detached handle and a tripod of the same metal, which were found in room No 7, and four metal vessels which were discovered, placed one inside the other, in the north-west corner of room No. 9, as if they had been left there at the time when the building was destroyed. (See Plate XXVIII *a* and *c*.) All the objects enumerated were found on the floor and must consequently belong to the period when the edifice ceased to exist. The metal implements discovered in room No. 7 were a few feet above the floor-level but still within the walls of the building. The finds will be described at the end of this paper.

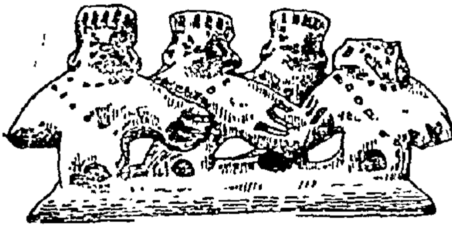


Fig. 2.

Adjoining convent L to the west there is another courtyard, measuring 38′ 4″ by 39′ 2″, with five rooms along its north and west sides. The large size of these rooms, as compared with those of L and D, renders it doubtful whether they likewise served the purpose of monks' cells. Nothing, however, was found to indicate that they were meant for any other use. It is noteworthy that in the cells of M no trace of pavement was found. The courtyard with which these rooms communicate contains a rectangular tank, 13′ 6″ by 10′ 10″ and 2′ deep, paved with brick tiles of 15″ × 8″ × 2″ and enclosed within a low wall 2′ wide, which is built of bricks of the same size laid in stretchers and headers. The tank received its water supply from the south and from the east, where it communicates with the courtyard of L. It has an outlet in its north-western corner from where a covered drain runs through rooms Nos. 2 and 3 and leaves the building by means of an opening in the

[1] Possibly these balls of earth served the purpose mentioned by I-tsing (Takakusu), p. 91. ff.

west wall. It is interesting that on the walls enclosing this tank also, except on that to the west, beams of charred *sāl* wood were found which may have served the same object as surmised in the case of the adjoining building. The courtyard is paved for a large part with a concrete floor sloping down towards the north-west. A thick layer of charcoal covered the whole courtyard; over it again were masses of pottery and bricks. The latter belonged to a wall which seemed to have fallen either from the east or from the west.

On the north side of the courtyard there are three rooms communicating with it by means of doorways 2′ 7″ to 2′ 9″ wide. The walls between these rooms and also that separating the north-east corner-room from room 4 of the adjoining building L, are built of very heavy bricks (14″ × 9″ × 2½″). Yet the foot of these walls is higher in level than that of the remaining walls which are built of smaller bricks. Evidently the rooms to the north of the courtyard were added afterwards and the building material was taken from some early edifice. This follows also from the circumstance that the west wall of room M 3 is added on, as appears from a joint at the place where it meets the west wall of rooms M 4 and 5 which, as will be seen from the plan, is much less in width. This outer wall is 4′ wide and stands in places to a height of 11′. At a distance of 37′ to 57′ from the south wall of D, the west wall of M has fallen westwards.

The walls enclosing the courtyard are best preserved on the north side where they retain a height of 6′ 7″. Along the west side, the wall is preserved from the north-west corner of the courtyard for a distance of only 6′ 7″, namely as far as what must have been the entrance to room 4. Its height and width are 6′ 4″ above the level of the courtyard and 4′ 1″ respectively. It is built of bricks of various sizes, the largest 10½″×8½″×2¼″ and 12″×8½″×2¼″. The absence of a *chaukaṭ* at the doorway of room 4 is noteworthy. Further south the wall could be traced to a depth of 7′ below the floor-level.

On the south side of the courtyard only two bits of wall are preserved, 3′ 2″ in height above the floor-level. At the east end a doorway, 3′ 4″ wide, provides a communication with the adjoining buildings to the south. At the side of this doorway to the west a piece of wall will be noticed projecting into the courtyard. Along the north and south side are low benches of brickwork. That on the north side measures 17′ in length and 4′ 5″ in width and is 7″ high, whereas that on the south is only 8′ long, 4′ 2″ wide and 8″ high. Each contains a groove, 1′ deep.

It has been said above that the monastery L-M must belong to an earlier period than the great convent D described previously. Its date can be more definitely fixed with the aid of inscribed documents found within its precincts. Earliest of these are three clay seals of about A.D. 400—the exact find-spots of two of which have already been noticed. These two found in L are identical. The one discovered inside the well is slightly damaged, the other is much obliterated. The third seal found in room M 3 is in an excellent state of preservation. As two of these seals were found at the floor-level and one inside the well, they help to prove that the destruction of the building occurred about the time to which they belong or shortly afterwards—we may say in the course of the fifth century. This is confirmed by other inscribed objects found in this edifice. Among the débris along the east wall of the courtyard of M a

pierced seal-die of baked clay was found which, from the character of its inscription, I would assign to about 500 A.D. Another specimen bearing the same legend but not so well preserved came to light in room L 11. These objects will be fully described subsequently. Here I wish only to note that they must have been in use at the time when the monastery L-M ceased to exist, and that A.D. 500 must, therefore, be the approximate date of its destruction.[1] The cause of its ruin is plainly indicated by lumps of charcoal found among the débris inside the building. Whether it was burnt down wilfully or met its fate in a forest conflagration, such as frequently must have occurred in a district covered with *sāl* woods, it is impossible to decide. But there can be no doubt that fire was the cause of its end. One of the seals also showed distinct traces of burning.

We may assume that the monastery D was built shortly after the destruction of its predecessor. This point is of great interest, as we know that the image of the dying Buddha belongs exactly to this period. It would seem, therefore, that at the same time when the colossal Nirvāṇa statue was set up by the Abbot Haribala, a new monastery was built to accommodate the congregation of friars attached to the shrine. Possibly the earlier sanctuary had fallen a victim to the same catastrophe as the old monastery. In my previous paper I have pointed out that the old plinth with its ornamentation of carved brickwork presumably belongs to the Kuṣaṇa period. The old monastery, which certainly existed in the early Gupta epoch, was perhaps founded at the same time.

D.—Southern Group of Monuments.

Along the east wall of monastery L there runs a platform of brickwork, 2′ 2″ wide and 8″ high, which rests on a lower platform 11′ wide 2′ 6″ high. Adjoining this lower platform we find a concrete floor which apparently belongs to a courtyard between the old monastery and the Nirvāṇa temple. Only the western portion of it has yet been cleared. The eastern portion is hidden under a confused mass of brick buildings, mostly *stūpa* basements, of which the upper layer is at a level with the top of the great plinth. The platform in front of the monastery L possibly once supported a verandah. It is paved partly with concrete and partly with brick rubble and has two projections indicative of the entrance to the large room L 12. Towards the north the platform breaks off not far from the south-east corner of D. At its south end it is bordered by a low brick wall running from east to west, the whole distance from here up to its northern extremity being 83′ 9″. This southern wall, which is 2′ wide and 2′ high, contains several carved bricks which must have been taken from some earlier building. It starts from the east wall of the old monastery and runs due east for a distance of 81′ 6″, where it turns southward. Evidently the wall once formed the southern enclosure of the courtyard which separated the old monastery and the Nirvāṇa temple. This is clear from the existence of a gateway[2], 6′ in width, at a distance of 43′ from the monastery. Near this gateway a number of large-size carved bricks were found lying on the floor. They may have made part of the wall

[1] A few more inscribed documents of uncertain date, but presumably contemporaneous with those mentioned, will be found on the list below, p. 83, Nos. 4-7. I must add that a small fragment of an inscribed clay seal of later date (c. A.D. 700) was found in M, see below, p. 84, No. 10, but it cannot bear much weight if balanced against the evidence afforded by all other inscriptions found in L-M.

[2] This gateway is not shown on the general plan, which was prepared before its becoming exposed.

which must have lost a considerable portion of its original height, but there can be no doubt that originally they belonged to the central monument, either temple or *stūpa* of which the plinth is partially preserved. From its turning point the wall runs southward for a distance of 30′ 8″ and then re-assumes its original direction almost due east, thus forming the southern boundary of the group of small *stūpas* and other buildings described in my previous paper. A second gateway, likewise 6, in width, exists at a distance of 52′ 4″ from the point where the wall turns eastward. Beyond this gate the wall has disappeared completely.

The existence of this wall offers a valuable clue as to the relative age of the buildings. It shows clearly that the old monastery from which it starts and the southern group of minor monuments are contemporaneous. The circumstance that the floor between monastery and temple has the same level as the payement of the southern *stūpa* yard points to the same conclusion. Moreover, we may conclude that the early plinth of the central monument must belong to the same or to a somewhat earlier period than the minor monuments which presuppose its existence. The old monastery, as shown above, existed certainly in the early Gupta epoch; its founding perhaps goes back to a still more remote period. This well agrees with my assumption, that the ancient plinth with its cornice of carved brickwork belongs to an earlier period than the image of the dying Buddha and presumably goes back to the days of the Kuṣaṇa rulers.

The western-most portion also of the southern group which was before concealed under Mr. Carlleyle's bungalow has now been exposed. Here also we find a continuity of square bases belonging to small *stūpas* built not only side by side, but one on the top of the other. The result is a confused mass of brickwork in which it is often hard to discern the individual monuments. It is, however, possible to distinguish three layers of *stūpas* situated some 3′ over each other, so that the uppermost are at a level with the top of the great plinth. Remnants of two later pavements are also extant at a height of 3′ and 6′ above the original courtyard. The *stūpa* basements are of varying dimensions and only in one case (No. 18) part of the circular drum is preserved; another basement (No. 38) is decorated with small pilasters of the same type as those found in building C. Both belong to the lowermost layer of monuments which are at the same level as the early plinth, and presumably belong to the Gupta period.

The group of monuments enclosed within the wall just described has now been completely excavated. But on the south side of that wall the buildings were found to exist in no less numbers and to extend even beyond the boundary of the site. On the plan [1] published by Mr. Carlleyle a distinct mound is shown, due south of the great *stūpa*, its centre being nearly 150′ distant from the *stūpa* plinth. This mound proved to consist of the remains of several *stūpas* built one upon the other. The main building of this group is a *stūpa* plinth (No. 30) measuring 38′ 8″ in length from east to west and 4′ in height. It has a cornice supported by brackets, and probably once bore a *stūpa* of ornamented brickwork of the same type as No. 14 described in my previous paper. This may be inferred from the occurrence of numerous carved bricks, similar to those used in *stūpa* No. 14, on and round the plinth in question.

[1] *A. S. R.*, Vol. XXXII, Plate III.

On its top remains of several *stūpas* of evidently later date are found. As the excavation of this group of monuments has not yet been brought to an end, its further description will be given in a subsequent paper.

E.—Monastery E.

In exploring the southern and south-western portion of the mound, it became more and more manifest that the ancient remains extend beyond its limits and cover an area much larger than could be anticipated. This fact was likewise borne out by the discovery of a large brick building (marked E on the accompanying plan) in a field to the north-east of the *stūpa* C described in my previous paper. It was found outside the limits of the Kōṭ, without its existence being indicated by any elevation of the soil. It would seem, however, that at one time this ground also made part of the mound, as some heaps at and near the spot were pointed out to me as boundary marks thrown up by Mr. Carlleyle to indicate the extent of the site. To the west of the monastery D, also, among the Rāmnagar road similar boundary-marks may be seen. They show plainly how much, in the space of only thirty years, the mound has lost in size owing to the constant encroachments of the agriculturists.

As the exploration of building E has not yet been completed, a full description of it will be reserved to a subsequent publication. Enough, however, was laid bare to show that it is a detached monastery, slightly larger than L and very similar in plan. The building is rectangular in shape and measures 71′ 6″ from east to west and 67′ 6″ from north to south. It will be seen from the plan that its orientation does not agree with the cardinal points and differs considerably from that of the other buildings of the site. Its outer walls are 3′ 6″, the inner walls 2′ 8″ wide. They stand to a height of 2′ 6″ to 3′ above the floor and of 4′ outside at its highest point. As in the case of other buildings of this class, we find rows of cells opening out on a quadrangle (43′ by 42′ 6″), but here this inner space is occupied by an almost square brick structure (30′ by 29′ 5″), the nature of which has not yet been ascertained. Thus passages are formed, some 6′ 6″ wide, which are so arranged that they are produced on both sides as far as the outer walls, at least in the excavated western portion of the building. It will be remembered that in the monasteries L and D the passages are continued only on one side, which would seem to be a more satisfactory arrangement involving less waste of space and securing greater stability. On the west side of building E four cells were found. Those on the north-west and south-west corners, which owing to the arrangement just noticed are isolated from the others, are square. It will be seen that the space allotted to each occupant is somewhat less than in the monasteries of the main group of buildings.

Though this building E did not yield any finds and in itself is only a slightly varied specimen of the ordinary type of a Buddhist convent, its existence outside the boundaries of the mound and beneath the even surface of the fields opened a wide prospect of further discoveries.

F.—Compound Wall.

Towards the end of his report[1] Mr. Carlleyle speaks of a boundary line traceable

[1] A. S. R., Vol. XVIII, p. 95. *Cf.* V. A. Smith. *The remains near Kasiā*, p. 5. The existence of an enclosure seems to have been known to Cunningham. Cf. *A. S. R.*, Vol. I, Plate XXVI.

at some distance on three sides of the Māthā Kũar kā Kōṭ and enclosing what he terms "the outer or monastic city of Kuśinagara." To the west of the mound, he says, "this boundary line may be seen most distinctly as a slightly raised edge containing fragments of bricks." On the north and south sides of the Kōṭ also it could be traced.

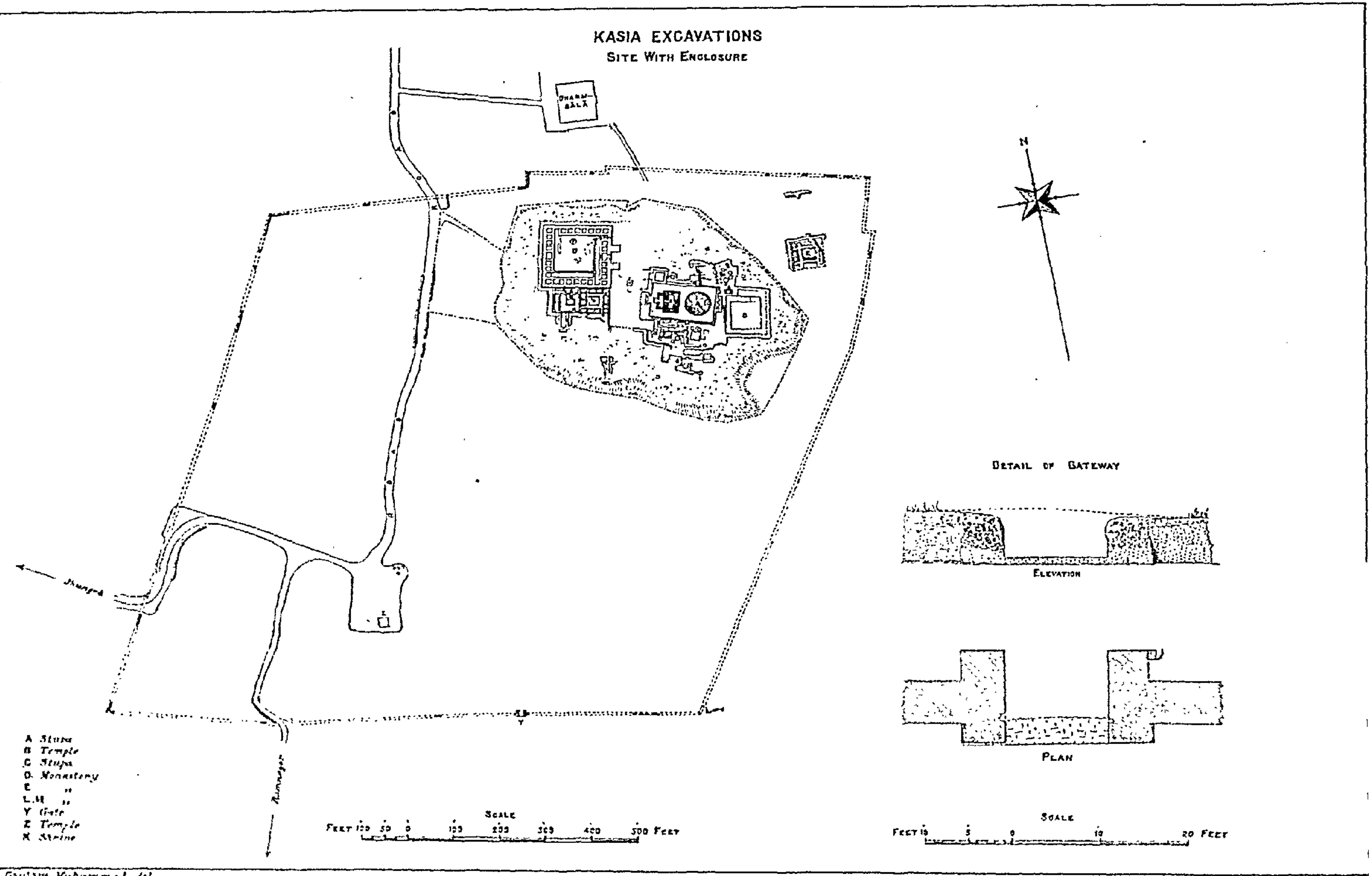
Last year's excavations have shown that this so-called boundary-line is formed by a heavy brick wall, wholly concealed below the surface of the fields. The slight elevation of the soil and the occurrence of broken bricks was indeed in places still noticeable. Elsewhere, when the top of the wall was found only a little below the present ground-level, its existence was betrayed by the vegetation above—either by the thinness of the sown crops or by the growth of aloe and other weeds. By partial tracing and partial excavating, I succeeded in establishing the position of this wall. Only on the east side of the site it was found impossible to follow it owing to the accumulation of river-silt; but its north-east and south-east corners being known, its course on this side also may be said to be approximately fixed.

The enclosure (*vide* Plate XXVI) is approximately in the shape of a rhombus. The distance from its south-east to its south-west corner was found to be 1,250′. As the four sides are nearly equal, its total length may be estimated at 5,000′ which closely agrees with the 5,200′ put down by Mr. Carlleyle for his "boundary-line." The area, thus enclosed, must amount to nearly 36 acres. It will be noticed that this wall comprises not only all the buildings at and near the Māthā Kũar kā Kōṭ, but also the colossal seated Buddha image known as Māthā Kũar and the temple in which it was placed. This shrine, therefore, belongs to the group of monuments which have accumulated round the *stūpa* and temple of the dying Buddha. How many more buildings lie hidden beneath the shaggy sugarcane fields within the sacred enclosure it is impossible to say. But the vast extent of the enclosed area brings once more forcibly to the mind that this Buddhist site must once have enjoyed a renown of exceptional holiness.

Before describing the enclosing wall more in detail, I must mention that its southern side was found to contain the remnants of a large entrance gate situated not far from its south-east corner. This gate, it will be seen, is placed west of south from the main group of buildings, and due south of the west end of the mound. There is much reason to deplore the fact that its scanty remains do not offer any clue to the question how the passage of 11′ 10″ wide which it leaves was covered over. But although it adds little to our knowledge of old Indian architecture, its position is of considerable interest for local topography. As far as the evidence of last year's explorations goes, there is no other gate of similar size giving access to the sacred enclosure. We may, therefore, safely assume that, if indeed this gate marks the main entrance to the site—as from all appearance it does—it indicates at the same time the way leading from it to the nearest town or village.

As to the age of this gate, there is nothing to guide us except the size of the bricks, which is $13\frac{1}{2}''\times 7\frac{1}{2}''\times 2\frac{1}{4}''$ and $14''\times 8''\times 2''$, a size only slightly smaller than that found in the early *stūpa* plinth and in the early monastery L-M. It contains also bricks of $8\frac{1}{2}''\times 8''\times 2''$ and $8''\times 4''\times 2''$, but these seem to be merely portions of the larger type. The masonry is carefully joined and contrasts with that of the wall

PLATE XXVI.


KASIA EXCAVATIONS
SITE WITH ENCLOSURE
DHARMSALA
N
DETAIL OF GATEWAY
ELEVATION
PLAN
SCALE
FEET 10 5 0 10 20 FEET
SCALE
FEET 100 50 0 100 200 300 400 500 FEET
A Stupa
B Temple
C Stupa
D Monastery
E "
L.M "
Y Gate
Z Temple
X Shrine
Ghulam Muhammad del.

itself which is roughly constructed and consists mostly of brick-bats. Near the entrance gate the height of the wall is 4′ 8″ and its width 5′ 11″. Its top is here about 1″ below the present ground-level.

When following the wall towards the east, we find that at a point due south of the large monastery D. its top is 1′ 7″ below the fields. A little further, opposite the village of Anrudhvā, it bends north-eastwards. Here the height of the wall is 5′ and its top is 2′ below the level of the fields. At some distance to the west of the entrance gate the top of the wall is only 1′ 10″ below the surface, though its height at this point is not more than 1′ 10″. Further west again at the point where it meets the Rāmnagar road it is 1′ 6″ high. Its south-west corner forms a sharp angle pointing in the direction of the village of Jhungvā-South, the distance to that village being some 200 yards. Here the height of the wall is 5′ and its top is close to the surface. From this point the wall runs in a north-easterly direction parallel with and at a distance of 370′ from the Rāmnagar road. Throughout, its top is at a level with the surface or only a few inches beneath. Its course is plainly marked by dots of aloe and other wild vegetation. Due west of the main group of monuments it was excavated for a distance of 113′. It is worthy of note that on this side it was not found to contain a gate.

At its north-west corner the wall forms an obtuse angle pointing towards the village of Jhungvā-North. Here the top is 1′ 10″ below the present ground-level. After recrossing the Rāmnagar road, it bends round and runs northward for a short distance (37′ 3″), then it turns again to the east. From this point up to its north-east corner the top is some 3′ to 4′ below the surface. At a point 127′ from that corner its height was found to reach 6′. It will be seen that it runs very close to the north side of the mound. Its north-east corner is rectangular and points in the direction of an ancient tank known as Kusmi Pōkhar which is situated between the Gorakhpur road and the village of Bindauliā. The distance from that corner to the ancient boundary of the mound marked by Mr. Carlleyle is only 127′. From the north-east corner southwards the wall was traced for a distance of 302′ up to a point due east of the great *stūpa*. On this side it was impossible to expose the foot of the wall which here lies below water-level. The layer of river silt was found rapidly to increase, so that at the farthest point traceable its top was not less than 7′ 6″ below the surface. Further south the wall entirely disappears, but there can be little doubt that it continues in a south-westerly direction and finally joins the south-east corner described above.

The main point to be noted is that, since the construction of the wall, the ground-level has considerably risen. As the wall must have sunk at the same time, we cannot exactly say how much, but we have seen that on the west side the foot of the wall is 5′ below the present ground-level, and on the east-side perhaps 12′. It is of interest to note that the accumulation of the soil is greatest towards the south-east.

G.—The Kalacuri Temple.

As noted above, the long wall encloses within its precinct the colossal seated Buddha image (height 10′) which is popularly known as Māthā Kūar and has given its name to the site. Cunningham and Carlleyle designate it as the statue of

"Buddha the Ascetic." Mr. Smith remarks that "it would be more correct to say that the statue represents Buddha seated under the Bodhi tree after he had attained the rank of Buddha and had done with austerities." To speak quite correctly, the image shows Gautama neither as an ascetic nor after his enlightenment, but—the truth lies in the middle – at the moment immediately preceding the Bodhi when in his decisive battle with Māra he called the Earth to witness his generosity in his previous existence. "From beneath his robe," the Pāli text [1] says, "he drew forth his right hand and [with the words] 'Art thou witness or no witness to me of my having given great gifts seven hundred fold in my former state as Vessantara' towards the great Earth he stretched out his hand." This earth-touching attitude (Sanskrit *bhūmisparśa-mudrā*) has become the conventional pose in which Buddha is pictured at the supreme moment of his enlightenment. This explains at the same time why the temple in which the image once stood is orientated east. Sacred tradition holds that Buddha was seated under the Bodhi tree with his face turned towards the east. In setting up an image, it was deemed essential to make it agree with the sacred texts both as regards attitude and position. For the same reason the great temple of Bodh-Gayā faces east. Nirvāṇa images, on the contrary, like that of Kasiā are placed facing westward, because Buddha was supposed to have died in that position.

Of the shrine to which the image in question belongs only the basement now remains. It was excavated by Mr. Carlleyle,[2] but had become buried again. In the course of last year's explorations, I had it laid bare again, in order to obtain a plan and elevation of the little that remains of the edifice. The basement is nearly square measuring 21′ 6″ from east to west and 23′ 2″ from south to north exteriorly and 9′ 5″ by 10′ 1″ interiorly. Inside hardly any traces are left of the brick pedestal found by Mr. Carlleyle. The size of the bricks used in this building (9″ × 7″ × 2″) is the same as that of the latest *stūpas* of the Kōṭ. To the north of the temple there is a circular well 5′ 4″ in diameter.

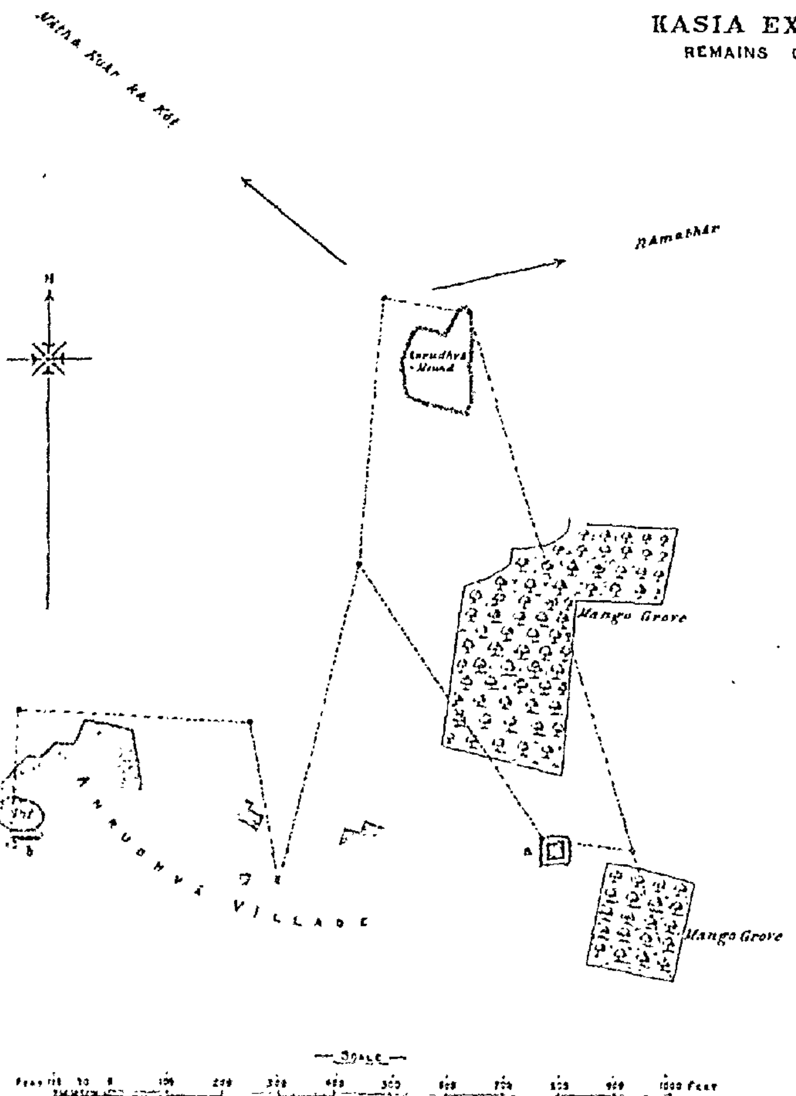
The temple was founded by a scion of the Kalacuri race in the 11th or 12th century, as appears from a Nāgarī inscription found on the spot by Mr. Carlleyle and since removed to the Lucknow Museum.[3]

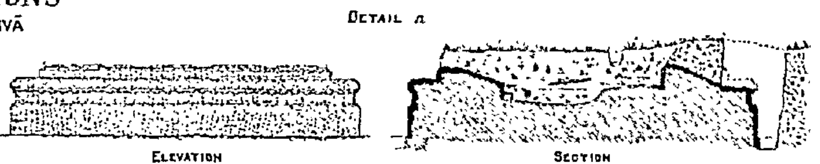
H.—Remains of Anrudhvā.

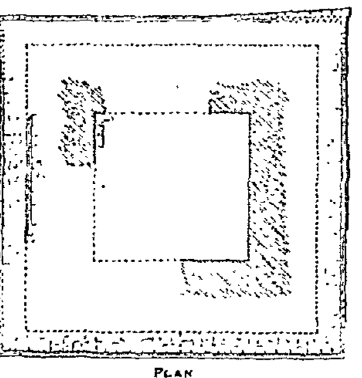
Whilst the excavations at the Māthā Kūar kā Kōṭ were in progress, I was informed of the existence of ancient walls in and near the village of Anrudhvā. This village, situated 2,500′ south-east of the Kōṭ, was believed by Cunningham to mark the site of the town of Kusinārā which, according to Hiuen Tsiang, was situated 3 or 4 *li*, *viz.* half a mile, south-east of the sacred *sāl* grove in which Buddha was believed to have died. A mound, a short distance to the north-east of the village, which Cunningham describes as being 500′ square, he proposed to identify as the site of the palace of the Malla chieftains of Kusinārā. Mr. Vincent Smith has rightly pointed out that the extent of this mound is much over-estimated by Cunningham,

[1] *Jātaka Introduction.*
[2] *A. S. R.*, Vol. XVIII, p. 56. Cf. V. A. Smith, *op. cit*, p. 4.
[3] Cf. Kielhorn. *Epigraphic Notes* No. 8 *Nachrichten der k. Gesellschaft der Wissenschaften zu Göttingen Phil. hist. Klasse*, 1903. *Heft*, 3, p. 300 ff.

KASIA EXCAVATIONS
REMAINS OF ANRUDHVĀ







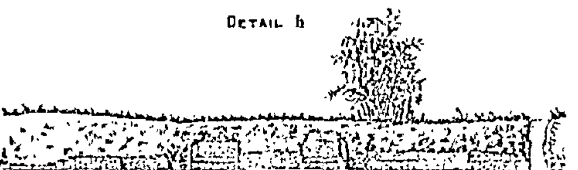




PLATE XXVII.

the actual measurement being only 170′ from north to south and 115′ from east to west.[1] The possibility, however, must be admitted of the mound having diminished in size owing to the encroachments of agriculture in the thirty years which had elapsed since Cunningham wrote his account of the Kasiā remains. With regard to the main site, this certainly has been the case, as is already indicated by Mr. Carlleyle's boundary marks referred to above.

I may also point out that, assuming for a moment the Māthā Kūar kā Kōṭ to represent the traditional spot of Buddha's Nirvāṇa, we should have to look for the town of Kusinārā half a mile to the south-east not of the temple of the dying Buddha, but of the entrance gate of the sacred enclosure. For Hiuen Tsiang states explicitly that half a mile north-west of the town was found the *sāl* grove, and that in this grove the place where Buddha had died was marked by a brick temple containing a Nirvāṇa statue. It follows that the town of Kusinārā would have to be sought not at Anrudhvā but beyond that place, *viz.* in the area between Anrudhvā and the village of Sisvā, two miles south of Kasiā. My explorations, however, have not been extended in this direction.

This much is certain, that the remains discovered at Anrudhvā do not reveal the existence of a town, but evidently belong to another group of religious—probably Buddhist—monuments. On the brink of a mango grove at a short distance east of the village and 225 yards south of the mound mentioned above, was found the plinth of a building 32′ square at the base and 27′ at the top. The foot of the wall was found 8′ 9″, the top 3′ 6″ below the level of the surrounding fields. The size of the bricks (14″×8½″×2″) which agrees nearly with that found in the early plinth of the great *stūpa*, points to great antiquity. The cornice is built of moulded bricks. Outwardly, this building presents the appearance of a *stūpa* base, but inside distinct traces of a room were found, measuring 14′ × 13′ 6″. The corners of this room correspond with those of the outer wall, so that it may be assumed to have formed part of the original building. If so, it would seem to represent a small shrine; but it is certainly strange that on none of the four sides any indication of an entrance is found.

In a pit in the centre of the village of Anrudhvā the square basements of three small *stūpas* came to light, placed in a row from east to west. The bricks of which they are built are somewhat smaller than those of the monument east of the village. Their average size is 12″×8″×2″. Owing to the position of these remains in the midst of the village, it was impossible to carry on excavation at this spot. It may, however, be surmised that these *stūpas* as well as the shrine in the mango grove belong to a group of minor buildings surrounding some important monument which most probably is to be sought in the Anrudhvā mound.

II.—FINDS.

A.—Terra-cottas.

The almost total absence of objects of stone is a point which first of all should be noted. The physical condition of the district readily accounts for this. The only stone sculpture discovered in the course of this year's excavations was a small

[1] *A. S. R.*, Vol. I, p. 79, V. A. Smith, *op. cit.*, p. 5 f.

fragment (height 6 cm.) of what appears to have been a standing statuette probably of Buddha. Only the feet of it remain. It was found among the group of small *stūpas* 150′ south of the Nirvāṇa *stūpa*.

The absence of stone objects is to a certain extent compensated by the abundance of articles of baked clay. In my previous paper it was noticed that some of the earlier monuments were largely built of carved bricks. Detached specimens of such bricks turned up in considerable number. Some of very large size, which seem to have made a part of a string-course, were found to the north of the great *stūpa* plinth. From their size and find-spot, there is reason to assume that they belonged to the central monument of which the plinth still remains. Others of smaller size, found among the cluster of *stūpas* 150′ south of the great plinth, seem to originate from a small *stūpa* of the same type as No. 14 described in my previous paper.

Among terra-cottas I wish to notice in the first place two fragments of a Buddha head. The larger fragment, 32 cm. in circumference, contains most of the face well modelled with straight nose, long-drawn eyes and heavy lips. The surface, where preserved, is smooth and deep red. The absence of the *ūrṇā* is noteworthy. To the left a portion of the hair is preserved, arranged in schematic curls. The smaller fragment, 4 cm. long, is part of the scalp showing the hair treated in the same fashion. The fragments were found near shrine K and may have belonged to a Buddha image placed either in that shrine or in one of the niches of the early plinth.

A curious rudely fashioned terra-cotta (fig. 2 ; height 8cm.) was discovered in cell 7 of the old monastery L. It shows a row of four Garuḍas standing with out-spread wings and wearing turbans and earrings as in the sculptures of Gandhāra. The head of the bird on the proper left end is injured. That of the next one which was broken was recovered and fixed again. The object is widened and flattened at the base so as to make it stand. Whether it can have had any connection with worship is questionable. Another similar terra-cotta (height 9 cm.) was found near shrine K. It has only two Garuḍas, but may originally have contained more, as one side shows a break. A single Garuḍa (height 7·8 cm.), found in the closet between cells 9 and 10 in monastery L, may also here be mentioned.

Among the objects obtained in the well (7′ deep) in the centre of the same building was a clay cube (2·7 cm.), marked on each side with a roughly incised symbol. On one of its sides is the *svastika*. On another are scribbled some letters, too indistinct to be read. Another cube marked on its six sides with one to six dots, exactly as on European dice, was discovered on the pavement to the east of monastery L.

In the course of the excavations numerous fragments of ancient pottery were collected which, according to their being found in the early or in the later monastery, can be assigned to different periods. Here I wish only to note some sherds of a thin vessel decorated with figures of horsemen which were obtained in building L and therefore must belong to the Gupta period. Numerous necks of well-polished earthen vessels came to light, remarkable for their diminutive mouth. Perhaps they may be identified with "the life-preserving vessel" mentioned by I-tsing as being used by Buddhist monks.

To the north of the great *stūpa* plinth near the early shrines G and K a considerable number of fragments came to light, belonging to rudely modelled pot-shaped

images. They consist of a flat-bottomed body to which a pair of clumsy arms and legs is attached, so as to give the figure the appearance of being seated with the hands resting on the knees or on the hips. The fingers and toes are indicated by a row of five strokes. The heads with rudely drawn faces and square head-dress are detached and provided with a tenon fitting in the neck of the vessel, so as to serve the purpose of a stopper. It is noteworthy that all these "pot-images" are meant to represent female figures. Judging from the fragments, their average size including the head, must have been some 20 cm. It seems that they were somehow connected with worship, as all the fragments, some thirty-five heads and fifty arms and legs, were found close together on the spot indicated. As their find-spot was at a level with the floor of shrine K, there can be little doubt as to their early date.

Among minor objects of baked clay, I wish to note some thirty-five spindle-whorls of various sizes (6 to 13·5 cm. circumference), fifteen discs with spiral ornament (3 to 4·5 cm. diameter at the base) and a mould with which objects of this kind were produced.

B.—Metal Vessels.

The most valuable finds made in the course of this year's excavations were a dozen metal vessels which may be assigned to the Gupta period, as they were all obtained in the early monastery L-M and evidently had been abandoned there at the time when this building was destroyed by fire. (*Cf.* above p. 71.) They were found in three lots. (See Plate XXVIII.)

An incense burner with detached handle and tripod, all of brass (perhaps originally silvered) were discovered among the débris in cell L 7. (See Plate XXVIII*a*.) The censer itself consists of two hollow hemispherical halves 19·4 cm. in circumference and 1 mm. thick. The lower half is provided with a ledge round its circular opening and with a pin 6 cm. long, which passes through a ring fastened to the upper half. In this manner the two halves fit closely together so as to form one hollow globe. The bottom of this globe is flattened. The top is provided with a narrow, open neck through which evidently the smoke of the incense was allowed to escape. The upper half has, moreover, three circular holes to admit the air. The pin with which the lower hemisphere is provided fits in the rectangular opening of the handle, which is hollow and measures 12·8 cm. in length. It is fifteen-sided and has two projecting rings on each end. The tripod, which was found with the censer, consists of a very thin shallow dish, circular in shape and measuring 7·2 cm. in diameter, supported by three slightly curved legs. Evidently the censer was meant to be placed on the tripod.

In room M 3 a collection of seven metal vessels came to light, placed one inside the other. (See Plate XXVIII*b*.) Four of these are plain bowls, (*kaṭōrā*) of *phul* of 2 to 3 mm. in thickness. Their height varies from 4 to 6·5 cm. Their circumference at the top is 24, 36, 46·5 and 47 cm. respectively. A fifth vessel of the same metal presents the appearance of a cup with hollow foot, 10 cm. high and 20 cm. in circumference at the top. The two remaining vessels of this lot are of very thin copper. One is a cup, 6 cm. in height including the foot and 45 cm. in circumference

at the top. The other is a water-pot, 9 cm. high and 35 cm. at its largest circumference. It is provided with a neck 14 cm. in circumference and with a short spout.

In the north-west corner of cell L 9 were found four vessels likewise placed one into the other. (See Plate XXVIII*c*.) They are all composed of *phul*. One is a large, rounded bowl 10 cm. in height and 65 cm. in circumference at the top. Its largest circumference is 65·6 cm. The thickness of the metal is not more than 0·5 mm. At a distance of 0·8 cm. from the top it is provided with a narrow band The second vessel is a shallow basin of very thin metal but with a 6 mm. thick rim round its top. Its height is 5 cm., its circumference at the top 53 cm. The two remaining vessels are of the *kaṭōrā* type, but a little more rounded than those described above. They are 6·5 cm. high and 44 and 45·5 cm. respectively in circumference at the top. The thickness of the metal is 3 mm.

C.—Inscriptions.

The remark made above with regard to finds in general refers particularly to epigraphical material. The excavations yielded not a single inscription on stone, but a great number of inscribed clay objects. A common feature of these epigraphs is that the letters are invariably raised, whereas in stone inscriptions of the pre-Muhummadan period they are nearly always sunk.[1] According to their legends they may be divided into four classes.

The first class, well known to students of Indian archæology, are the tablets, inscribed with the so-called Buddhist creed, or more exactly the Formula of the Faith (Sanskrit *dharma-paryāya* Pāli *dhamma-pariyāya* [2]). The use of these tablets is apparent from a passage in I-tsing [3], who relates that in an image or *caitya* two kinds of *śarīras* are to be placed, namely 1st the relics of the Great Teacher and 2nd, the Gāthā of the Chain of Causation, in other words the Formula of the Faith. It is curious that this formula is here placed on a level with the bodily relics of the Buddha. To give it a tangible shape, it had, of course, to be written on some object. Hence the occurrence of stone slabs or clay tablets, inscribed with the formula, inside *stūpas*. This explains why the clay objects of this class were almost exclusively found among the ruined *stūpas* which have accumulated to the south of the central sanctuary. Only a few specimens occurred inside and near the monastery D, which occupies the north-western portion of the mound. (See beneath p. 85, Nos. 25-27). Mr. Carlleyle [4] mentions that he discovered more than twenty such tablets at the back of the temple of the dying Buddha, from which it would seem that they were also used as offerings.

The tablets found by me (those mentioned by Mr. Carlleyle have not been preserved) are of diminutive size, the inscribed circular surface measuring only from 1·8 to 2·2 cm. in diameter. It follows that the legend, divided over four or five lines,

[1] The only instance of a stone inscription in raised letters is a Sārnāth image inscription. Cf. *A. S. R.*, 1904-05, p.

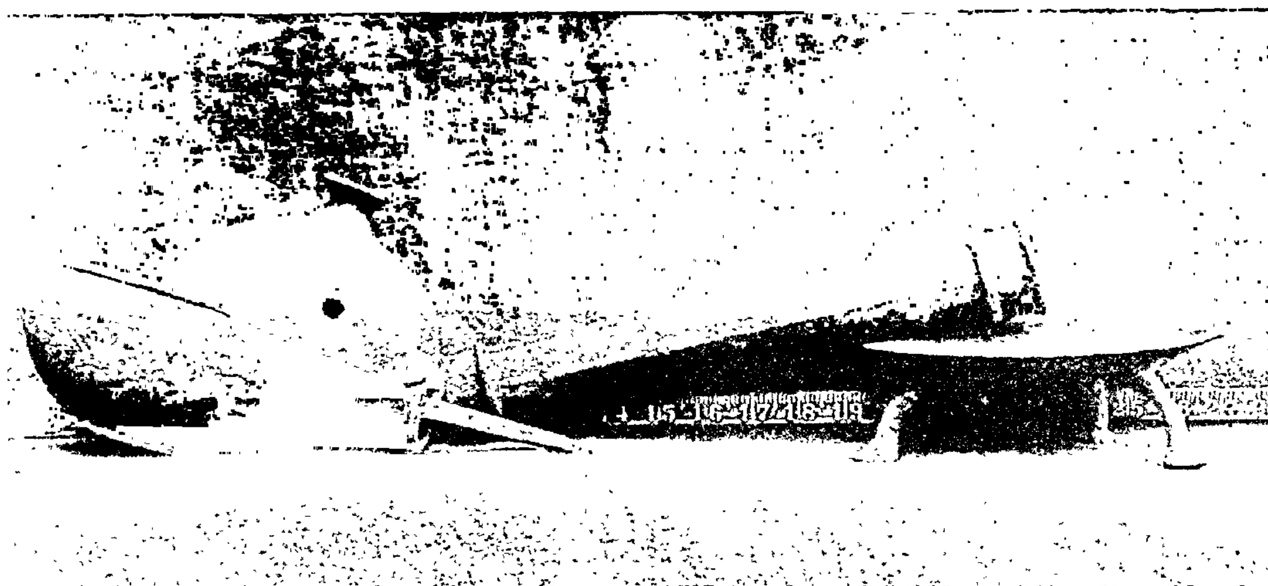
[2] In the Bhabra edict this word occurs in its Māgadhī form *dhamma-paliyāya* in the sense of a religious book. *Cf.* Kern *Jaartelling*, p. 32 ff.

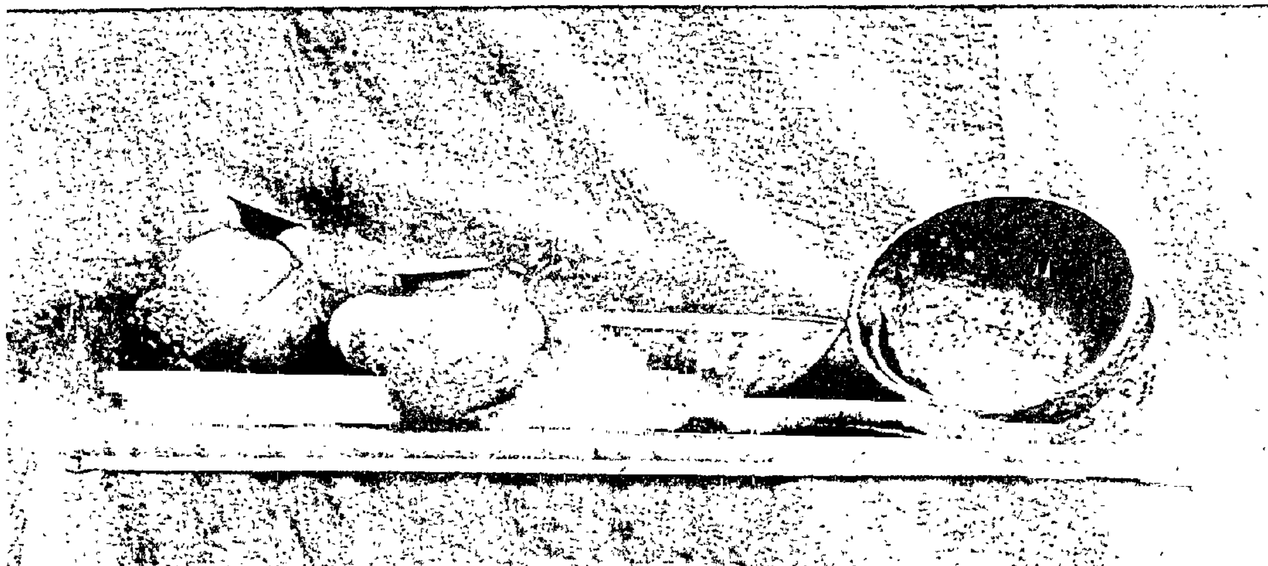
[3] *A record of the Buddhist religion* (Takakusu), p. 151.

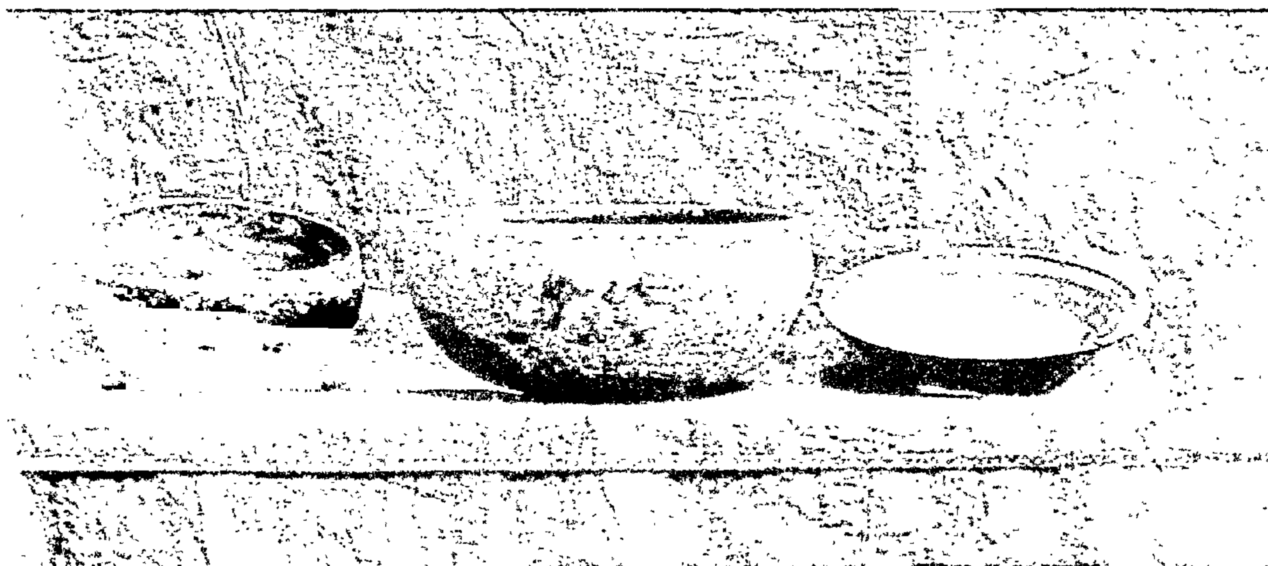
[4] *A. S. R.*, Vol. XVIII, p. 70.

PLATE XXVIII.

EXCAVATIONS AT KASIA.







METAL VESSELS FOUND IN THE OLD MONASTERY, L-M.

is almost illegible owing to the smallness of the letters. In many cases it is entirely effaced. It is certain, however, that they belong to a comparatively late date (c. 700-900 A.D.). Stone inscriptions also, found on other sites, point to the fact that the use of this formula in epigraphs belongs to the expiring days of Indian Buddhism. It bears a strong analogy to the use of the universal formula of bliss *Oṁ maṇipadme huṁ* in Tibet.

A second kind of inscribed tablets, closely related with those just described, show the figure of a Buddha or Bodhisattva accompanied by the Formula of the Faith. Such tablets have been found on nearly every Buddhist site in India[1] and are still used both in Burma and Tibet. Two specimens of this class were unearthed at Kasiā in this year's excavations (*cf.* beneath p. 85, Nos. 28 and 29). They are oblong in shape, the die surface measuring 5 by 4 cm. In one case the figure represents the Buddha Śākyamuni, in the other the future Buddha Maitreya. Their date would seem to be about A.D. 900, as far as can be deduced from their very small and indistinct lettering. Their find-place was the mound east of monastery D. A specimen with three *stūpas*, found by Mr. Carlleyle at the back of the temple together with the twenty mentioned above, seems to have been of the same type.

The term "clay seal", usually applied to objects of this and the previous class, is incorrect. The chief feature of a seal, individuality, is entirely wanting here. Besides it is evident that they were never attached to any documents, and therefore cannot have served the purpose of seals. On the other hand the Kasiā excavations yielded a great number of inscribed clay objects—these forming the third and fourth class—which may be rightly designated by that name. From the very distinct marks at the back it is plain that they were attached to other objects. Sometimes these marks are deep and sharp as if left by some object of metal, sometimes they are clearly caused by strings tied together in a knot or by flat bands laid crosswise. In the latter case there can be little doubt that the seals were used, in precisely the same way as our wax seals, to secure letters or parcels tied together with strings or tapes. In the other case it is possible that they were put on padlocks of the kind still used in India. The latter explanation I owe to the ingenuity of Mr. H. Cousens I may also note here that in some cases one lump of clay contains two or more seal impressions, either produced by the same seal or by different seals. The same peculiarity was found with most of the seals discovered by Dr. Bloch at Basarh.

According to their legends the Kasiā clay seals are to be subdivided into two classes. One class consists of seals which contain only a man's name in the nominative or genitive case, sometimes accompanied by some symbol, and which consequently must have belonged to private individuals. (*Cf.* beneath p. 84, Nos. 10-11 and 13-24.) A few seals of this type were found in the courtyard of the monastery D, but the bulk were discovered on the refuse heap to the east of that edifice. Except for the information they supply regarding the period during which this building was occupied, they do not contribute to our knowledge. The only point worth noticing is the

[1] A specimen from Bodh-Gayā in the Berlin Museum is reproduced in Grünwedel-Burgess, *Buddhist art in India*, p. 180, fig. 128.

occurrence of names like Tārābala and Tārāśraya, which illustrate the prominent position held by the goddess Tārā in mediæval Buddhism. A statuette (height 36 cm.) found at Kasiā by Mr. Carlleyle [1] " embedded in the inside of the wall of the front ante-chamber of the temple," presumably represents the same deity.

The fourth class of inscribed clay objects possesses far greater interest and exhibits a type hitherto unknown. (*Cf.* beneath p. 83*f*, Nos. 1-2 and 6-9.) Besides some symbol, they bear legends showing them to be seals belonging to the community of Buddhist friars attached to a certain convent. The interesting point is that in all but two cases the monastery mentioned in these inscriptions is that of the Great Decease or Mahāparinirvāṇa. There can be no doubt that the convent indicated by that name was no other than that which stood on the traditional spot of Buddha's death near Kusinārā. The question rises : do these seals belong to the spot where they were found or have they been imported from elsewhere ? In the former case, they prove the remains near Kasiā to represent the great sanctuary of Kusinārā, in the other case they prove the reverse.

Unfortunately the use of these seals is by no means clear. From the marks on their backs it is evident that they have been attached to other objects and it seems most plausible that these objects were letters or other documents sent by messenger. On the other hand, it is a curious circumstance, that all but two of these seals belong to one and the same monastery, whereas in the case of letter-seals one would naturally expect to find specimens originating from different places. This circumstance first led me to assume that the monastery mentioned in the inscriptions must be the one in which these seals were found ; in other words, I believed them to afford proof of the identity of Kasiā with Kusinārā.[2] On reconsidering the question, however, it occurred to me that the almost exclusive occurrence of Mahāparinirvāṇa seals (leaving aside those belonging to private individuals discussed above) may be accounted for in a different way. There may have existed some close relation between the convent of the Great Decease and that represented by the Kasiā remains. The existence of such a relation would become fully intelligible, if we assumed with Mr. Smith that the site of Kasiā was connected somehow with the tradition regarding Buddha's Nirvāṇa.

There are among the seals of this class only two which do not bear the name of the Mahāparinirvāṇa. These two belong to the convent of Makuṭa-bandhana which, as we know, was the place where Buddha's remains were cremated. It was situated in the immediate vicinity of the town of Kusinārā, not very far from the place of the Nirvāṇa. We learn from Hiuen Tsiang that the spot of the cremation was marked by a distinct group of monuments. It is interesting that on the later one of these two seals, which I assign to c. 600 A. D., the name is given in the same abbreviated form "Bandhana" which according to Takakusu underlies I-tsing's Pan-da-na.[3]

The earlier of these two seals and the contemporaneous seal of the Mahāparinirvāṇa monastery are of special interest, as besides a legend in Gupta characters of c. 400 A.D., they exhibit an emblem illustrative of the local tradition. The seal of the Great Decease shows Buddha's coffin between the twin *sāl* trees of Kusinārā ; that

[1] *A. S. R.*, Vol. XVIII, p. 67.

[2] *Cf.* My *Annual Progress Report* for 1905-06, p. 26f.

[3] I-tsing, *op. cit.*, p. 39.

of the Makuṭa-bandhana shrine shows a flaming funeral pyre. The two subjects occur in the Graeco-Buddhist sculptures of Gandhāra,[1] but are unknown both in the early Indian school as well as in mediæval Buddhist art. Thus these seals once more bear out how much Buddhist art owed to the Hellenistic sculptures of the North-West. It is curious that on the later seals of both convents these special subjects are replaced by the wheel-and-deer emblem which originally belonged to the Deer-park Convent of Benares but gradually had become a universal symbol of the Buddhist community.[2]

At present the Kasiā clay-seals cannot be said to afford any conclusive evidence the one or the other way with regard to the great topographical problem.

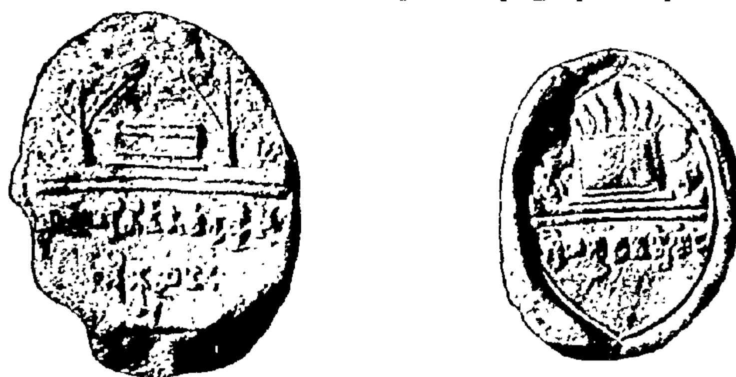


Fig. 3.

D.—List of Clay-Seals.

1. Clay seal, oblong, die surface 5·5 by 4·5 cm., edges broken. In upper half: coffin between twin *sāl* trees; indistinct object at each end. In lower half legend in two lines: (1) *Mahāparinirvāne(ṇe) cāturdiśo* (2) *bhikṣuśaṁghaḥ*. "The universal congregation of friars at the Great Decease." The character is the eastern type of the Gupta alphabet of c. A.D. 400. The one but last sign deserves special notice. As above the preceding *sa* there is a trace of an *anusvāra*, it can be only *gha*. The substitution of *n* for *ṇ* in the first line is curious. The back of the seal has marks which show it to have been attached to some object. It was found inside the well in the courtyard of L at a depth of 5′ 6″. Another specimen, greatly obliterated, was found in the closet between L 3 and L 4 on the floor.

2. Clay tablet, oblong, die surface 5 by 3·2 cm., well preserved. In upper half: flaming pyre with kneeling figure to proper right and indistinct object to proper left. In lower half legend in one line *Śrī-Makuṭa-bandhe saṁgha*. "The congregation at the sacred Coronation Hall." The character is the Gupta alphabet of c. A.D. 400. The *akṣaras* are finished at the top with double wedges. The last *akṣara* is placed vertically for want of space. The back is smooth. The tablet was found in cell M 3 at the original floor level.

3. Pierced seal die of black burned clay. Die surface oval 4·2 by 3 cm. In upper half palm-tree between two indistinct objects. In lower half legend in one line *[Ā]ryāṣṭa-vṛddhai*. "For the growth of the noble eight." The character is the Gupta alphabet of c. A.D. 500. It was found among the débris in the courtyard of M not far from the surface of the mound. Another specimen, slightly injured, was found in cell L 11 in low excavation. The objects at the sides of the palm-tree are wanting. (*Cf.* Cunningham, *A. S. R.*, Vol. XI, p. 36, Plate XII, No. 4.)

4. Seal die of red burned clay. Die surface oblong 3·3 by 2·6 cm. Legend *Sihatrāta*. First and third *akṣara* uncertain. Gupta character of the 5th century. Found along east wall of the courtyard M.

[1] *Cf.* Foucher, *L'art gréco-bouddhique*, pp. 574 ff, figs. 285-286 and 287, 290, 298 and 299.

[2] *Cf. A. S. R.* for 1904-05.

5. Pierced seal die of red burned clay. Die surface rectangular 3·3 by 2·2 cm. Legend injured...*rakṣita* (?) Gupta character of the 5th (?) century. Found in courtyard of L on pavement near wall.

6. Clay seal, die surface circular 2 cm. in diameter. In upper half two indistinct objects. In lower half defaced legend in two lines [*Śrī-Mahāparinirvāṇa-*(2) *vihāra bhikṣusaṅghaḥ.*] Date c. A D. 600 (?).

7. Clay seal, die surface circular 2·5 cm. in diameter. In upper half some indistinct symbols. In lower half defaced legend in two lines [*Śrī-Mahāparinirvāṇa-*(2) *vihāra ārya-bhikṣu-saṅghaḥ.*] Date c A.D. 700 (?). One specimen, mostly obliterated, found in L 7 ; another fragment found elsewhere.

8. Clay seal, die surface circular 2·3 cm. in diameter. In upper half the wheel of the law between two deer couchant. In lower half legend in three lines *Śrī-Bandhana-Mahāvihā-*(2) *re* (*ra*) *ārya-bhikṣu-saṁ-*(3) *ghasya.* " Of the community of reverend friars in the great convent of the sacred Coronation. " Date c. A.D. 600. One specimen found in the south-west corner of the southern passage of monastery D.

✓ 9. Clay seal, die surface oblong 2·6 by 3 cm. In upper half the wheel of the law between two deer couchant. In lower half legend in three lines *Śrī-Mahāparinirvvāṇa-*(2) *mahāvihāriyārya-*(3) *bhikṣusaṅghasya.* " Of the community of reverend friars attached to the great convent of the blessed Great Decease." Date c. A.D. 750. Two complete specimens and sixteen fragments found in the mound east of monastery D. One fragment was found at the foot of the connecting wall, 30′ from the north-east corner of D, at a depth of 4′ below the surface of the mound. All have traces of strings at the back, one bears marks of crossed flat bands.

10. Fragment of oblong seal, height 0·5 cm. Legend ...*śrayaḥ.* Date c. A.D. 700. Found in courtyard M on floor.

11. Fragment of rectangular seal in black clay, height 1·5 cm. Legend...*hura.* Date c. A.D. 700. Found in mound east of D.

✓ 12. Clay seal, die surface circular 2 cm. in diameter. In upper half the wheel of the law between two deer couchant. In lower half legend in three lines : *Śrī-Mahāparinirvvāṇa-*(2) *vihāriyārya-*(3) *bhikṣu-*(3) *saṅghasya.* " Of the community of reverend friars belonging to the convent of the blessed Great Decease." Date c. A.D. 900. Three specimens, two with one complete and two (respectively three) fragmentary seal impressions, and eighteen fragments found in courtyard of D and in mound east of D. Some have string marks on the back, but most have smooth, clear-cut, deep marks as if left by some metal object.

13. Circular seal in black clay, diameter 2 cm. Legend [*Bā*] *sukasya.* Under legend a radiating circle. Date c. A.D. 900. Two specimens, one defaced, and one fragment combined with the *Apramāda* seal (No. 15).

14. Circular seal, diameter 2 cm. Legend [*Bathānaśriprabha*]. Above legend : conch-shell. Beneath legend : conventional lotus (?) Date c. A.D. 900. One complete specimen, somewhat defaced, and five fragments.

15. Oblong seal, 1·7 by 1 cm. Legend *Apram*[*āda*]. Date c. A.D. 900. One complete specimen found inside ancient well of monastery D at a depth of 6′. It occurs also combined with other legends.

16. Oblong seal, 1·6 by 0·6 cm. Legend *Abhidhā-siddhi.* Date c. A.D. 900. Thirteen specimens found in courtyard D, in every case combined with legend *Kusalaḥ* (No. 17).

17. Oblong seal, 1·5 by 0·5. Legend *Kusalaḥ.* Date c. A. D. 900. Seven specimens (besides those mentioned under No. 16) ; in four specimens a double, in one a triple, and in one a quadruple legend. Found near ancient well in courtyard D.

18. Circular seal in black clay, diameter 1·4 cm. Legend [*Sa*]*tvamati.* Above legend : foliated ornament. Date c. A.D. 950. One specimen.

19. Rectangular seal in black clay, 1·5 by 0·7 cm. Legend *Tārābala.* Date c. A.D. 950. One lump with four seal impressions, of which three incomplete, found in mound east of D.

20. Circular seal in red clay, diameter 1·5 cm. Legend *Tārābala.* Above and beneath legend in distinct ornament. Date c. A.D. 950. One specimen.

21. Oblong seal in black clay, 1·7 by 1·2 cm. Legend *Tārāśrayaḥ.* Date c. A.D. 1000. One specimen with double legend and one fragment.

22. Oblong seal in black clay, 2 by 0·6 cm. Legend *Yahākasya*. Date c. A.D. 1000. One specimen with a double legend.

23. Oblong seal in brown clay, 2 by 1·9 cm. Legend *Nannikasya*. Above legend conch-shell. Date c. A.D. 1000. One specimen.

24. Incomplete oblong seal, height 0·6 cm. Legend *Prabhāka* (?) One specimen found in mound east of D.

25. Circular tablet, diameter 1·8 cm. Buddhist creed in five lines. Date c. A.D. 700. Six specimens among later *stūpas* beneath Mr. Carlleyle's Bungalow and three among southern group of *stūpas*.

26. Circular tablet, diameter 2·2 cm. Buddhist creed in 4 lines. Two specimens among southern groud of *stūpas* and one (burned) in centre of courtyard D, 5′ to 6′ below surface of mound.

27. Circular tablet, diameter 1·9 cm. Buddhist creed in 5 lines. At foot of northern wall, 30′ from north-east corner of D; 4′ below surface.

28. Oblong tablet of black baked clay. Die surface 5 by 4 cm. Raised border. Buddha seated on conventional lotus under Bodhi tree in the earth-touching attitude. Buddhist creed along border. Date c. A.D. 900. One specimen found in débris mound east of D.

29. Oblong clay tablet, die surface 5 by 4 cm. Raised border, partly broken. Bodhisattva Maitreya seated on lotus, right arm resting on right knee. Left hand holds *campā* flower. Oval halo. Miniature *stūpa* to proper right of head. Buddhist creed to right and left, indistinct, partly obliterated. Date c. A.D. 900 (?) One specimen found at foot of northern wall (south-side) 44′ from north-east corner of D.

30. Circular seal, diameter 2 cm. Skeleton seated in meditation under tree (?). One specimen.

31. Circular seal, diameter 1·8 cm. Skeleton seated in meditation, holding staff over right shoulder. Two specimens, one found in courtyard D on floor near ancient well.

32. Circular seal, diameter 1·6 cm. Skeleton seated in meditation, skull to proper right. One specimen found in courtyard D near wall.

33. Circular seal, diameter 2·5 cm. Three square bosses in bold relief. Numerous specimens.

J. PH. VOGEL.

RĀJAGṚHA AND ITS REMAINS.

THE campaign of exploration which opened during the past year at Rājagṛha, calls for no special introduction; for the site of this famous old city—the oldest of which we possess any remains in India—has long been identified with certainty, and not a little has been written about its history and its monuments.[1] As must necessarily be the case in dealing with such an extensive site, the work accomplished in the first season has been for the most part of a preliminary nature only, with a view to clear the ground for more extended operations in the future; and not the least important part of it has been the preparation of an accurate map of the site, which enables us to correct a number of mistakes made in earlier publications, and to approach with greater confidence the discussion of the topographical problems that have perplexed previous explorers. In the work of excavation I had the valuable co-operation of Dr. Theo. Bloch, Archæological Superintendent in Eastern India; I am indebted, also, to my personal assistant, Pandit Daya Ram, for much help rendered by him in the matter of supervision. Dr. Bloch stayed on at Rājgīr after my departure and carried out the digging at the Maṇiyār Maṭh in the Old City. He also, with Pandit Daya Ram, has made himself responsible for verifying and correcting the plans made by the native draftsmen, which were not completed until after I had left the site, as well as for writing up the accounts of the digging operations. To avoid confusion, these accounts are printed in a different type in the following pages.

The map published on Plate XXIX is the work of Mr. J. Wilson, late of the Survey of India, to whom my especial thanks are due for the care exercised in its preparation. The survey made by him extended from the village of Rājgīr[2] on the north to Phalgu on the south, and from Vaibhāra-giri on the west to Giriak on the east, embracing an area of between 30 and 40 miles. In order to render it the

[1] The following list of references includes, it is believed, everything of interest that has been written by modern explorers about Rājagrha. (1) Tieffenthaler, *Description de l'Hindoustan*, Tom. 1, p. 437. (1765). (2) Buchanan, in Martin's *Eastern India*, Vol. I, pp. 78-81 & 252-7. (3) Kittoe, *J. A. S. B.*, Vol. XVI, pp. 957-961. (4) Gen. Cunningham, *A. S. R.*, Vol. I, 1871, pp. 20-27, and *Ancient Geography of India*, pp. 461-8 (1871). (5) Broadley, *I. A.*, 1872, pp. 18-21, 69-74, & 106-110. (6) Gen. Cunningham, *A. S. R.*, Vol. III (1873), pp. 139—150. (7) Beglar, *A. S. R.*, VIII (1878), pp. 85-101. (8) Sylvain Lévi, *Comptes-Rendus de l' Académie des Inscriptions et Belles Lettres*, 1899, p. 73. (9) M. A. Stein, *I. A.*, Vol. XXX (1901), pp. 55 sqq.

[2] The spelling *Rājgīr*, which is adopted in this article, is in accord with the modern pronunciation. Both Gen. Cunningham and Dr. M. A. Stein write *Rāigir*, and Mr. Broadley Rajgír. The lengthening of the *i* is due to the shifting of the accent, as in *Muṅgīr* (Monghyr) from Sanskrit *Mudga-giri*. In this connection, Dr. Bloch notes that "the ancient name *Rājagṛha*, the 'Kings' house', finds its parallel in such local names as *Rājbāṛī*, which occur in various parts of north-eastern India. As *Rājbāṛī* in modern days, so *Rājagṛha* more than two thousand years ago meant simply 'the head-quarters of the local Zamindar.'"

PLATE

PART OF PATN.080. SEASON 1905-06

85° | 26' 15"

85° | 33' 45"

more serviceable, the base lines were taken from the old stations of the Great Trigonometrical Survey, and no pains were spared to secure accuracy in contouring the hills and mapping out the old lines of prehistoric fortifications and other remains. A glance at the map will suffice to show the advance that it makes on the two maps published by General Cunningham in the first and third volumes of his Reports.[1] Various special errors that have been corrected in plotting out the natural and artificial features of this hill tract will be noticed in the course of the following pages.

It is to be regretted that there was no time during the past season for surveying more of the western valley towards Yaṣṭi-vana, or for investigating the remains at Giriak. These, however, are matters which can well be deferred until a later date. In the meantime the main topographical problems to be discussed relate to the following:—

1. The walls of the old city of Kuśāgārapura.
2. The Gṛdhrakūṭa Hill.
3. The Karaṇḍa-veṇuvana, Pippala stone house and other remains near the northern gate of the Old City.
4. The Sattapaṇṇi Hall.

The first of these problems—that of the old city walls—need not delay us long. Hiuen Thsang says of Kuśāgārapura: "High mountains surround it on each side, and form as it were its external walls. * * * The town is extended from east to west and narrow from north to south. It is about 150 li in circuit. The remaining foundations of the wall of the inner city are about 30 li in circuit."[2] Fâ Hien tells us that the city was "from east to west about five or six le, and north to south seven or eight."[3] Now, of what is meant by the "inner city" there can be no doubt; it is represented by the innermost line of walls, shown plainly on the map. The plan of these walls is distorted in General Cunningham's maps, and he slightly overestimates their length, giving it as 4⅘ miles, whereas it is in reality about ⅗ of a mile less. Either estimate, however, is near enough to the estimated length given by the Chinese pilgrims. As regards the *outer line* of fortifications, General Cunningham is seriously at fault. Apart from other inaccuracies in plotting the line of these fortifications, he omits altogether the outer wall which stretches from Vaibhāra-giri to Sona-giri, a second one which lies between Ratna-giri and Chhaṭhā-giri, and a third between the latter peak and the Nākve[4] embankment; nor does he indicate in any way the long line of ramparts which starts at Udaya-giri and extends, in a practically unbroken line, to the eastern limit of the southern range of mountains. But this is not all. With his faulty map before him, the General proceeds to trace out the supposed line of outer walls as follows:—

From	Vaibhāra to Vipula	12,000 ft.
,,	Vipula to Ratna	4,500 ,,
,,	Ratna to Udaya	8,500 ,,
,,	Udaya to Sona	7,000 ,,
,,	Sona to Vaibhāra	9,000 ,,
	TOTAL	41,000 ft.

[1] *A. S. R.*, Vol. I, Pl. XIV, and Vol. III, Pl. XLI.

[2] Beal, *Buddhist Records of the Western World*, II, p. 150.

[3] Legge, *Travels of Fâ-Hien*, p. 82.

[4] This name appears as Nekpāi in Gen. Cunningham's publications, and also in the map accompanying this article, which had been printed off before the correct sound of the name had been ascertained.

Allowing for ascents and descents he reckons this to be approximately 8 miles, and then goes on to alter Hiuen Thsang's measurement of 150 li to 50 li, so as to tally with his own![1] As a fact, if we allow 6 li to the mile, and follow the line of the existing fortifications up and down hill from Vaibhāra-giri over Sona-giri, thence to Udaya-giri and along the southern range of hills to Giriak, and so back at intervals over Śaila-giri, Chhaṭhā-giri, Ratna-giri and Vipula-giri,[2] we find that the distance covered by the walls agrees remarkably well with the 150 li of Hiuen Thsang,[3] while, on the other hand, the existence of walls, unnoticed by General Cunningham, along the whole range of hills east of Udaya-giri, presents an insurmountable difficulty in the way of accepting his emendation of Hiuen Thsang's measurement. As regards Hiuen Thsang's statement that "high mountains surround (the city) on each side and form as it were its exterior walls," I must confess my inability to follow the General's argument that this description would not apply, if the outer walls ran along the summits of the hills bounding the eastern valley. The meaning of Hiuen Thsang's words seems to me perfectly plain. The hills themselves constituted the walls of the outer town, and the natural defences which they afforded were further strengthened with artificial fortifications. Even without the help of the statements made by the Chinese pilgrims, the fortifications which still survive would suffice to determine the extent of the outer town, and when we find that the length of the circuit walls, as well as their position along the line of hills girdling the valley, agrees with what the Chinese pilgrims tell us of them, there is surely no room for doubt on the subject. It is, indeed, seeking difficulties to distort both the monumental and literary evidence before us, as General Cunningham has done.[4]

A word has yet to be said about the construction of these prehistoric walls of Old Rājagṛha, the earliest remains that we know of in India. The faces of the walls are built of massive undressed stones between three and five feet in length, carefully fitted and bonded together, while the core between them is composed of smaller blocks less carefully cut and laid with chips or fragments of stone, packing the interstices between them. No mortar or cement is visible anywhere in the stone work.

The fortifications are standing to their greatest height on the east and west of the Bangaṅgā Pass, where their elevation is between eleven and twelve feet. On the rest of Sona-giri, and on Vaibhāra-giri, Vipula-giri and Ratna-giri, the walls are much ruined and seldom rise higher than seven or eight feet. From the fact that, wherever the height of between eleven and twelve feet is reached, the walls are invariably finished off with a course

[1] *A. S. R.*, I, pp. 22 sqq.

[2] The break in the line of fortifications to the east of Chhaṭhā-giri is a considerable one, and it is possible that the fortifications were never completed over these high mountains, but that is a fact which we could scarcely expect Hiuen Thsang to notice, especially as the walls had long been in ruins even in his day.

[3] By an unfortunate mistake of the draftsman, part of the outer line of fortifications on the eastern slope of Vaibhāra-giri has been shown on the accompanying map as a road. The wall commences on this hill from a large bastion, which will be noticed later, situated a little above the Pippala Stone house, and then runs down in a southerly direction up to the edge of the first ravine, whence it ascends in a north-westerly direction towards the crest of the hill. About a furlong below the easternmost of the modern Jaina shrines, the wall loses itself in what appears to be a stone causeway (28′ 8″ thick), but which in reality is no doubt a remnant of fortifications which once rose high above the ground; then, beyond the group of shrines, the causeway again gives place to a narrower wall.

[4] It may be noticed that there is another line of fortifications, unobserved by General Cunninghan, crossing the valley to the east of the Nākve embankment; so it is obvious that in any case the Nākve embankment could not have formed the eastern limits of the outer town.



1. PANORAMIC VIEW OF THE OLD CITY AND SURROUNDING HILLS FROM THE SON BHANDAR CAVE.



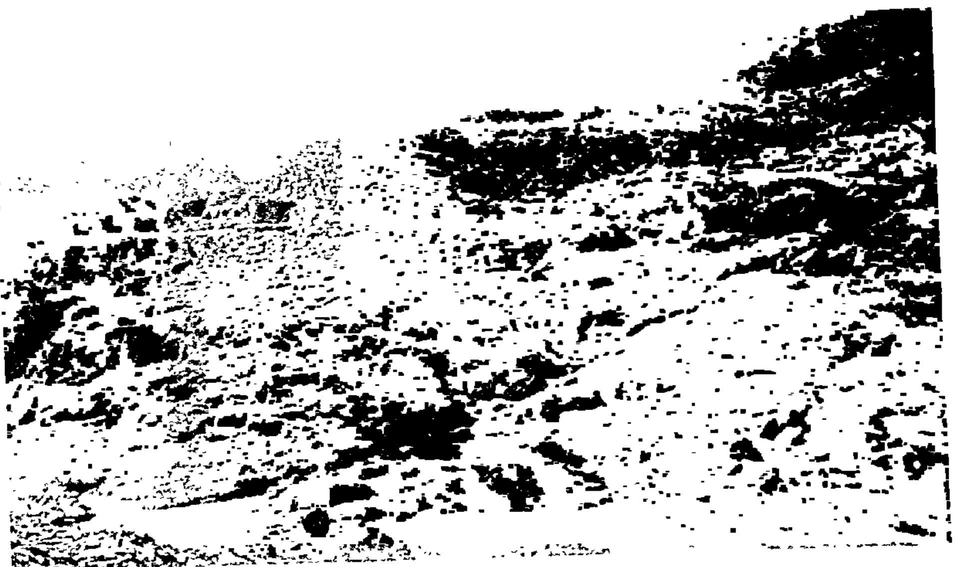
2. VIEW OF VAIBHARA HILL FROM THE NORTH.



3. NEW RAJGIR: FORTIFICATIONS FROM THE S.-W. CORNER.



1. BANGANGA DEFILE: FROM SOUTH.



2. BANGANGA DEFILE, SHOWING ANCIENT FORTIFICATIONS FROM NORTH.



3. SOUTHERN RAMPART OF FORT OF NEW CITY, SHOWING A BASTION, AFTER EXCAVATION.



4. ENTRANCE THROUGH RAMPART OF NEW CITY, FROM NORTH.

of small stones, and that there are no fallen blocks of stone lying near, we may assume that this was the original height of the massive masonry described above. Above this substructure, there was no doubt a superstructure composed either of smaller stone work or of bricks baked or unbaked, or possibly of wood and stone or brick combined.

The thickness of the fortifications varies somewhat on the different hills. The usual thickness is 17′ 6″, but the wall flanking the east side of the Bangaṅgā Pass is only 14′ at its beginning, increasing to 16′ 6″ higher up, while the stretch on the east slope of the Vaibhāra hill is some two feet above the average in width.

A noticeable feature of the fortifications are bastions attached to the outside of the walls, wherever especial strength was required. Sixteen such structures have been observed, of which seven occur at the Bangaṅgā Pass: namely, four on the west and three on the east side. They are solid rectangular buildings, constructed after the same fashion as the wall and built on to it at irregular intervals. In plan, they measure from 47′ to 60′ long by 34′ to 40′ broad, the long side always coinciding with the face of the wall on to which they abut. They rise to the same height as the wall, and, like it, were, no doubt, provided with superstructures which have now disappeared. The distances between the bastions on the west of the Bangaṅgā defile are 80′, 168′, and 185′ respectively; those on the east being 140′ and 146′.

Of the remaining seven bastions which still exist, four belong to the outer northern gate of the Old City, and are marked on the sketch plan in fig. 1. The one just above the northern gate on Vipula-giri is much dilapidated, while the other one on the same hill, further to the north, is even more ruined. Of the two on Vaibhāra-giri, the one immediately above the stone house is well preserved, but of the other, which is situated opposite the northern entrance and straight above the Godāvarī stream, only a few traces remain. The other three bastions are on the Vaibhāra-giri; the first about 150 paces west of the last of the four shrines on the summit, the second about 300 paces further on, and the last one nearly opposite the site of the Sattapaṇṇi Hall.

Another interesting feature about the outer fortifications of the Old City are stairs or rather ramps, built in the thickness of the wall along its inner face, in order to give access to the top. Only nine such ramps have so far been observed, and they are all in the stretch of wall running along the northern side of Sona-giri up to a point a little beyond the Jaina shrine, which is built on its summit. These ramps measure approximately 5′ 6″ wide, and 15′ long. They occur at quite irregular intervals, the distances between the nine noticed being 74′, 192′, 140′, 86′, 30′, 240′, 35′ and 480′, respectively, starting from the northern end.

The defences described above were further supplemented, possibly at a later date, by separate watch towers erected at various prominent points on the hills. Two conspicuous examples of these exist on the Vaibhāra hill, *viz.*, one just above the hot springs, and the other nearly midway between it and the group of shrines on the summit. The former of these has been rightly identified with the *Pippala stone house*, described by the Chinese pilgrims. It stands some 26′ high, and measures at the top 81′ 6″ from north to south and 78′ from east to west. The walls, like those of the rectangular bastions, have a slight batter. Near the base are small chambers measuring approximately 6′6″ × 3′6″ each, and entered through narrow openings about 3′ high. There are two of these chambers on the east side, five on the north, one on the west, and one on the south. Apparently, they were originally

constructed as shelters for the guards, and in after times, when no longer required for defensive purposes, would afford convenient cells for ascetics to meditate in. Four other watch-towers of a similar kind may be seen on the Vipula hill, and another on the easternmost peak of Ratnagiri.[1]

Gṛdhrakūṭa Hill.

Of the position of Mt. Gṛdhrakūṭa, Fâ Hien says:—"Entering the valley, and keeping along the mountains on the south-east, after ascending fifteen le,[2] (the travellers) came to Mt. Gṛidhrakūṭa. On this hill the peak is beautifully green, and rises grandly up; it is the highest of all the five hills."[3] Hiuen Thsang takes his direction and distance from a different point. "To the north-east," he says, "of the palace city going 14 or 15 li, we come to the mountain Gṛidhrakūṭa. Touching the southern slope of the northern mountain, it rises as a solitary peak to a great height on which vultures make their abode."[4] Had our information even been limited to these statements alone, there ought never to have been any difficulty in identifying the hill indicated, and it is hard to see how, with all the other information available, Gen. Cunningham and his assistant, Mr. Beglar, could ever have mistaken it. The former, it is true, took the direction correctly, but he identified Gṛdhrakūṭa with the peak known as Śaila-giri, which fulfils none of the prescribed conditions; while Mr. Beglar sought to locate it somewhere at the S.-W. end of the Vaibhāra Hill,[5] though he afterwards changed his opinion[6] and adopted the true identification which was first made by Mr. Broadley[7]. As a fact, there is only one peak in the direction indicated or, for the matter of that, anywhere else in the range of hills round Old Rājagṛha, which answers at all to the description of the Chinese pilgrims. That hill is Chhaṭhā-giri, which rises up in a solitary conical peak (Plate XXXII) between Ratna-giri and Śaila-giri. I felt convinced of the correctness of this identification when I first set eyes on Chhaṭhā-giri from the valley near the Nākve embankment, although I was not at the time aware that it had already been established by Mr. Broadley, and had nothing to go upon but the general appearance of the hill as seen more than a mile away. When subsequently I ascended the hill, every step brought some new feature to view, which served to establish its identity with Mt. Gṛdhrakūṭa. A few of these features have been noticed in Mr. Broadley's article and a few by Mr. Beglar, but their writings on the subject seem to have escaped

[1] For measurements and various other details of the walls and bastions described above, I am indebted to the notes of my assistant, Pandit Daya Ram.

[2] Gen. Cunningham says (*Geography of India*, p. 466) "According to Fâ Hien it (the Vulture's Peak) was 15 li or 2½ miles to the S.-E. of the new town." I do not know on what translation of Fâ Hien Gen. Cunningham relied, but neither Legge, who is quoted in the text above, nor Beal support his statement. The distance of 15 li given by Fâ Hien, would seem to be the distance from the entrance to the valley, since it is obvious that it could not refer to the ascent only of the hill.

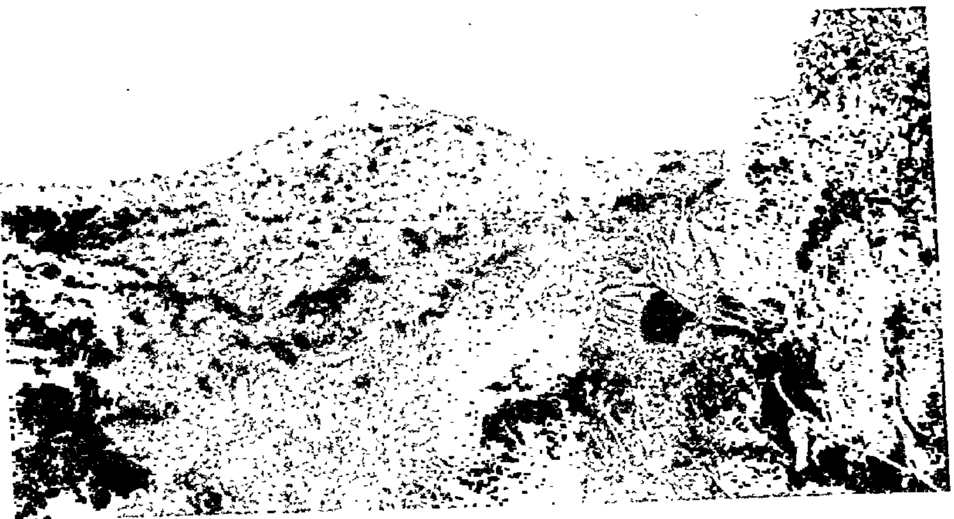
[3] Legge, *op. cit.* p. 82 sqq. Gen. Cunningham (*A. S. R.*, 1, 21.) takes the five hills to be Vaibhāra-giri, Vipula-giri, Ratna-giri, Udaya-giri, and Sona-giri, but it is certain that Gṛdhrakūṭa (Chhaṭhā-giri) was included among them, and the General must, therefore, be wrong. Perhaps Ratna-giri was reckoned as a part of Vipula-giri (the Northern Mountain), and the range from Chhaṭhā-giri to Giriak as the fifth.

[4] Beal, *op cit.* II, p. 152.

[5] *A. S. R.*, VIII, pp. 90 ff. It is hardly worth discussing Mr. Beglar's view in detail. He seems to have imagined that Fâ Hien skirted along the S.-E. face of Vaibāra-giri, though how he could possibly reconcile this view with Hiuen Thsang's statement is an enigma.

[6] *Cf.* the note following the preface of *A. S. R.*, Vol. VIII (1872-73). Mr. Beglar makes the mistake of calling the peak "Śaila-giri" instead of Chhaṭhā-giri"

[7] *Cf.* A. M. Broadley, *Geography of Magadha*, I. A., Vol. I, 1872, pp. 108-9. Mr. Broadley calls Chhaṭhā-giri "Deva-ghat", but the latter term would seem to be applicable only to the saddle of the hill towards Ratna-giri.



1. PEAK OF GRDHRA-KUTA HILL, FROM WEST.



2. WEST SPUR OF GRDHRA-KUTA, FROM NORTH.



3. PIPPALA STONE HOUSE, WITH JAINA TEMPLE BELOW, FROM NORTH-EAST.



4. PIPPALA STONE HOUSE, FROM SOUTH.

attention,[1] and it is well worth while to go carefully over the same ground again, particularly as the true identification of this famous spot is a matter of some importance.

The other main features which Hiuen Thsang noticed about Gṛdhrakūṭa were that its summit was long from east to west and narrow from north to south; that there was a precipice at the western end; and that north-west of a *vihāra*, located to the east of this precipice, was a rocky stream. These features, as any one who climbs the peak may see at a glance, are conspicuously absent from Śaila-giri, but one and all are to be found on Chhaṭhā-giri. The "Northern hill" alluded to by Hiuen Thsang is Vipula-giri, from the southern slopes of which (*i.e.*, from Ratna-giri) springs the peak of Chhaṭhā-giri. On the south-west side of this peak stretches out a narrow rocky spur (Plate XXXII, 2), which bends a little lower down in a more westerly direction, and then ends in precipitous crags, precisely as Hiuen Thsang tells us, while between this spur and the slopes of Ratna-giri is the rocky stream where Buddha is said to have dried his garment. All these natural features, it will be observed, tally exactly with Hiuen Thsang's description; but they are not the only proofs of the identity of Chhaṭhā-giri and Gṛdhrakūṭa. If others are wanted, they are to be found in the stone causeway and other structural edifices, which Hiuen Thsang saw on Gṛdhrakūṭa and which exist to this day on Chhaṭhā-giri. Hiuen Thsang tells us that when Bimbisāra was about to visit Buddha on Mt. Gṛdhrakūṭa, he raised a number of men to accompany him; that "they levelled the valleys and spanned the precipices, and with the stones made a staircase about 10 paces wide and 5 or 6 li long."[2] This "road of Bimbisāra", which Hiuen Thsang traversed, still exists, and still affords the most convenient footway through the jungle and up the hill side in approaching Gṛdhrakūṭa; but there can be little doubt that in prehistoric times it formed a line of fortification, and was built for that purpose. It stretches right across the valley from the summit of Udaya-giri to the summit of Chhaṭhā-giri, and links together the lines of fortification along the southern and northern hills. It bends a little, however, just outside the eastern angle of the Nākve embankment, and its continuation towards the south from this point may easily escape notice, until one sees it from the hills above. Sir A. Cunningham, indeed, does not seem to have observed it at all: at any rate, no part of it is shown in his map; though how the whole of it could have escaped his notice, if he ever visited this part of the valley, is difficult to understand.

At the foot of Chhaṭhā-giri the stone causeway crosses a ravine and ascends in a north-easterly direction as far as the precipice mentioned above. All up the hill side, it is built of rough undressed stones, like all the prehistoric walls of Rājagṛha, and its width is *from 20 to 24 feet*, which agrees well enough with the *10 paces* of Hiuen Thsang. On its outer side—that is, towards the valley—there seems to have been a wall some 3 or 4 feet thick. Only its foundations, however, remain and, being level with the causeway, it looks at first sight as if they had been laid there to widen it. Whether this wall was contemporary or not with the causeway, cannot be determined.

[1] *Cf.*, for instance, Thomas Watters, *On Yuan Chwang* (1905), Vol. II, p. 152. Mr. Watters was not apparently aware of Mr. Broadley's article, and speaks only of Gen. Cunningham's identification of the Śaila-giri peak as "possibly correct."

[2] It is noticeable that Fā Hien says nothing of this road of Bimbisāra; perhaps the story had not taken shape in his time.

To continue, however, Hiuen Thsang's description. "In the middle of the road," he states, "there are two small *stūpas,* one called Hia-Shing (Dismounting from the chariot), because the king when he got there, went forward on foot. The other is called T'ui-fan (Sending back the crowd), because the king, separating the common folk, would not allow them to proceed with him. * * * * There is a brick *vihāra* on the borders of a steep precipice at the western end of the mountain. It is high and wide and beautifully constructed. The door opens to the east."[1]

The two *stūpas,* which Hiuen Thsang found planted right in the middle of the causeway, are still there, and one has to turn aside to pass them. The first (Hia-Shing) is 80 yards from the base; it is composed of rough stone foundations with brick above, but all the superstructure has fallen to ruin. The second *stūpa* is further up the ascent, where the causeway bends round to the north. Its structure is similar to the first one. Both these *stūpas* were examined, but only the following small objects were found :—

Sixteen fragments of broken statues of the type common all over Bihar, dating from the tenth to twelfth centuries A. D.; *viz.*
- heads of Buddhist images;
- fragments of halos of same, one with *gandharva,* another with *caitya* ;
- fragment of breast and right arm, holding staff ;
- fragment of left hand, holding an alms-bowl ;
- fragment of border of statue with inscription :—*hetuṁ Tathāga*— ;
- fragment of *kalaśa* (from miniature *stūpa*);
- two iron nails.

Just beyond this T'ui-fan *stūpa,* the causeway crosses the rocky stream referred to, and above this point it can only be traced here and there, on the north side of the long rocky ridge. The whole length of the causeway from the Nākve embankment to the peak of Gṛdhrakūṭa is hardly more than a mile and a half, so that, if the Nākve embankment represents the limit of the "Palace City" towards the east, and if Hiuen Thsang took his distance of 15 li from here, it follows that his measurement is exaggerated. It is by no means certain, however, that he did calculate the distance from this point ; and in any case, working his way through jungle and climbing the steep sides of Gṛdhrakūṭa, he might well be pardoned for his exaggeration. I myself, when I first climbed the peak, thought the distance very much longer than it proved to be when the ground was afterwards surveyed.

The "*vihāra* on the borders of the precipice at the western end of the mountain" has, unfortunately, fallen to ruin, but there can be no question about the identity of the structure referred to by Hiuen Thsang. The bricks, which lie about, are exceptionally well cut, and some of them are elegantly carved, thus bearing out Hiuen Thsang's statement. Below the precipice, to the south of the *vihāra,* is a fair sized *stūpa,* no doubt the one mentioned by Hiuen Thsang. This *stūpa* was also excavated, but yielded nothing.

East of the *vihāra,* the hill top is broken up by gigantic masses of rugged rocks, and almost every yard of the ground between them is occupied by the remains of some brick or stone structure, while there are many more ruins below the ridge both on its north and south sides. Among all these it is not easy to identify with certainty

[1] Beal, *loc. cit.* II, p. 153.

the other structures and natural landmarks noticed by the Chinese pilgrims, though there is little doubt that some more will be identified, when anyone has time to spare for the purpose. In particular, it would be worth while trying to find the stone on which Buddha walked up and down for exercise, the great rock said to have been flung at him by Devadatta, the hole in the rock through which Buddha stretched his hand to pat Ānanda's head, and the rock in the stream, north-west of the ridge, on which Buddha dried his garment and which was seen by both Hiuen Thsang and It-Sing.[1]

One fact, which my investigations on Mt. Gṛdhrakūṭa have made abundantly clear, is that when we read of "stone houses" in Hiuen Thsang, structural edifices of rough unhewn stones must be meant, and not natural caves. There are no caves to which the pilgrim could have alluded by the side or to the south of the *vihāra* at the western end of the cliff, but there are numerous ruins of rough stone houses, and there can be no doubt that these are what he refers to. This is a matter of which we shall have something more to say in connection with the Sattapaṇṇi Hall.

Karaṇḍa-veṇuvana, Pippala Stone House, etc.

Coming to the north gate of the Old City, we may now follow the Chinese pilgrims in their descriptions of the "Bamboo garden," presented to Buddha by King Bimbisāra, of the Pippala stone house, where Buddha sat in meditation, and of the other landmarks near by. The passage in Fâ-Hien, which deals with this part of Old Rājagṛha, reads as follows:— "Out from the old city, after walking over 300 paces, on the west of the road, (the travellers) found the Karaṇḍa Bamboo Garden, where the old vihâra is still in existence. * * * * * North of the vihâra, two or three le, there was the Śmaśânam, which name means in Chinese 'the field of graves into which the dead are thrown.' As they kept along the mountain on the south, and went west for 300 paces, they found a dwelling among the rocks, named the Pippala cave, in which Buddha regularly sat in meditation after taking his (midday) meal."[2]

From Hiuen Thsang we get still more detailed information. He agrees with Fâ Hien in stating that the Bamboo Garden was "about one li from the north gate of the mountain city," but he tells us that the Pippala stone house was to the west of the hot springs, that behind its walls was a deep cavern, said to be the palace abode of an Asura, and that about 200 paces to the north of the *Veṇuvana Vihāra* was the *Karaṇḍa* tank. Now, of these landmarks noted by the Chinese pilgrims there is, fortunately, no question about the position of the hot springs, or of the Pippala stone house and cave of the Asura behind it, which are situated on the rocky slope to the west of the springs. The latter were identified by Gen. Cunningham in 1872 and are described in his report for that year.[3] Illustrations showing the Pippala stone house and the modern Temple with the hot springs inside it will be found in Plate XXXII, figs. 3 and 4, and Plate XXXIII, fig. 2. A fourth landmark, about the position of which there can practically be no doubt, is the north gate of the city. Gen. Cunningham calls this the Hastināpur Gate in his plan of the old city[4], and locates it nearly a quarter of a mile south of the confluence of the two small streams. But

[1] *It-Sing*, edited by Takukusu, p. XXXII.
[2] *Cf* Legge, *op. cit.*, pp. 84-85.
[3] *A. S. R.*, Vol. III. pp. 141-3 & Plates XLI & XLII.
[4] *A. S. R.*, Vol. III, Pl. XLI.

this position is obviously incorrect.[1] The gate of the inner or "Palace City" is by no means so far south as Gen. Cunningham places it. The gateway itself has perished, but its position is indicated by the line of the wall encircling the "Palace City," and is more precisely marked by a floor of 9″ thick concrete, which is situated 160 feet to the south-east of the confluence of the two small streams. Outside this inner gate, again, and 250 feet further north—right in the defile, that is to say, between Vaibhāra-giri and Vipula-giri—was another gate in the fortications of the outer city. It is some 16′ broad, and is flanked by walls (?) 52 thick, built of massive undressed stones. That on the west side is 59 feet long, and has a projection, on its northern face, measuring 25′ 6″ broad and 39′ long. The

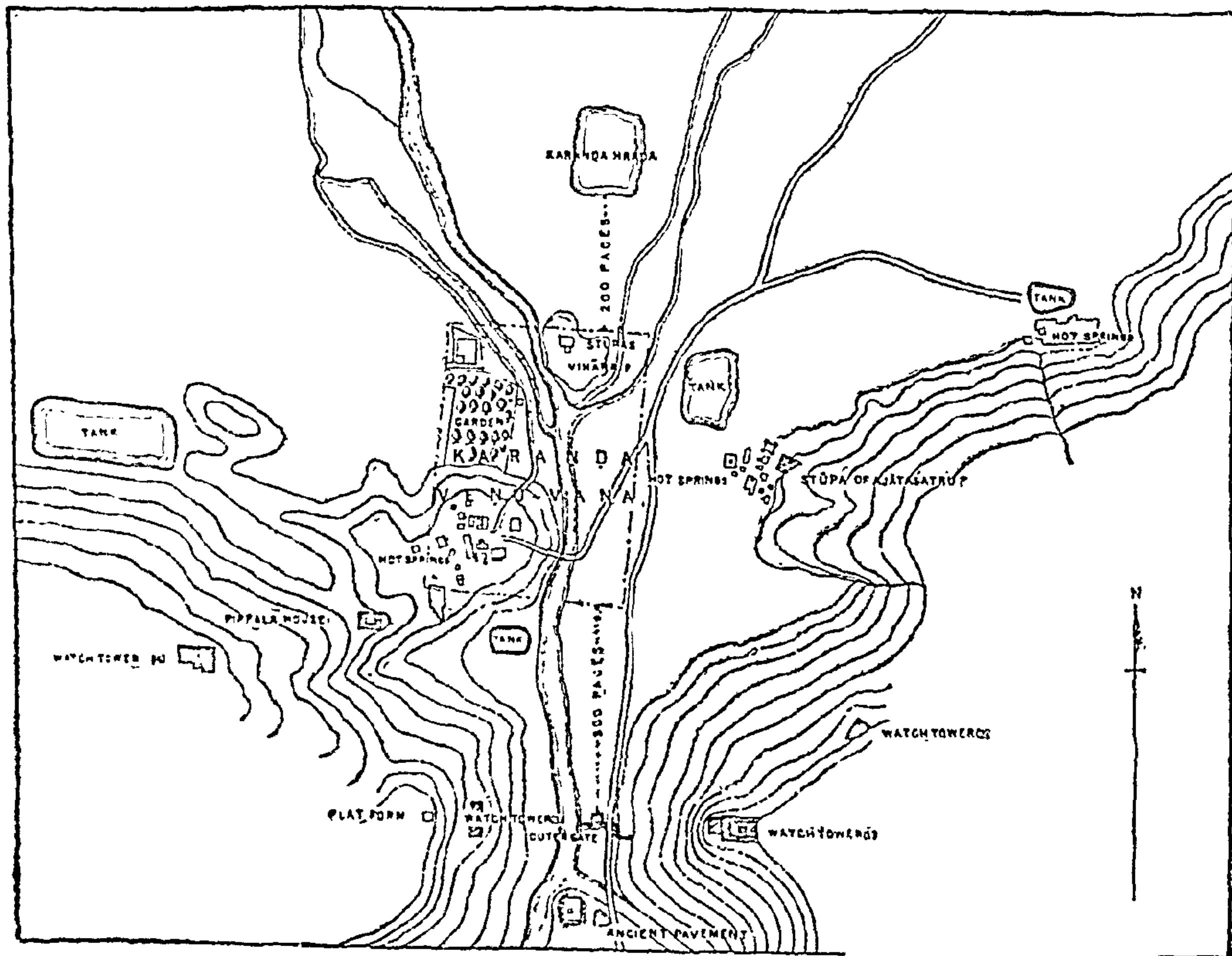


Fig. 1.

wall on the east has almost disappeared, but its west face is marked by a line of large undressed blocks, while the foundations of its northern and southern faces can be traced here and there. It is this outer gate, most certainly, to which the Chinese pilgrims refer, in speaking of the north gate of the city, and accordingly we must alter also the position assigned by Gen. Cunningham to the Karaṇḍa-veṇuvana, the Karaṇḍa-hrada, and the *śmaśāna*.

The entrance to the Karaṇḍa-veṇuvana is said to have been about 1 li or 300

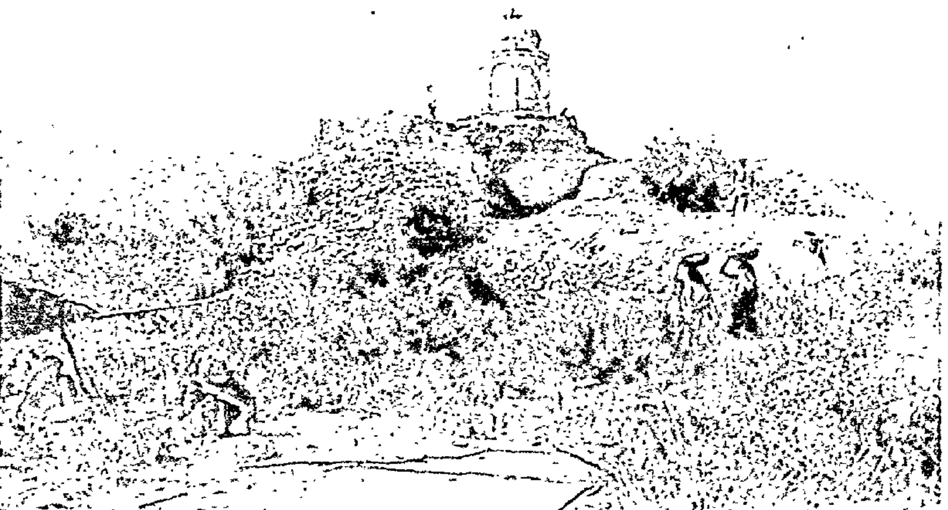
[1] The reason why Gen. Cunningham assigned this position to the north gate is not perhaps far to seek. Having made up his mind that the Son Bhandār cave was to be identified with the Sattapanni Hall, he had to make his theory fit in with Hiuen Thsang's statement as to the relative position of the Karanda-venuvana with regard to the Sattapanni Hall, and he fixed the former inside, instead of outside, the defile between the mountains, and accordingly had to set back his north gate of the city three hundred paces further south.



1. PASS BETWEEN VAIBHARA AND VIPULA HILLS FROM SOUTH.



2. EAST SLOPE OF VAIBHARA HILL WITH JARASANDHA'S *BAITHAK*, HOT SPRINGS, ETC., FROM EAST.



3. MANIYAR MATH: TOP OF CIRCULAR STRUCTURE WITH MODERN JAINA SHRINE ABOVE.

paces to the north of the gate, on the west of the road. Measuring this distance through the defile (*Cf.* Plate XXXIII) we come to the open ground on the left of the road, where gardens still exist, well watered by the stream and the perennial springs from above. Here was the entrance to the Bamboo Garden, which would, no doubt, occupy a considerable area of ground. The approximate extent of the garden is indicated on the sketch map in fig. 1. Towards its northern limit is a large mound of débris, marking the site of a number of ruined structures, and it is not improbable that the *vihāra* seen by Fā Hien and Huien Thsang lies buried beneath it. The mound has a circuit of 770′, and rises to a height of some 27′ above the level of the channel to the west of it. Its top is occupied by the grave of a Moslem saint and some other tombs to the south of it, the presence of which precluded any attempt to excavate the site at all thoroughly. A few trial trenches, however, were dug by Dr. Bloch around the large grave and on the eastern slope of the mound. The former brought to light the foundations of a room and the bases of nine brick *stūpas* surrounded by a concrete floor, about 6′ below the level of the grave. All the *stūpas* were opened, but were found to contain nothing but jars filled with earth. The trenches on the east slope of the mound revealed no structures, but some clay tablets impressed with the Buddhist creed in characters of the tenth or eleventh century were recovered and also the following antiquities :—

(1) Fragment of a sculpture representing the lower half of an image of a *Bodhisattva*, seated cross-legged on a lotus throne. On the pedestal appear two female figures—one sitting cross-legged with clasped hands, the other kneeling—and the Buddhist formula *yē dharmā*, etc., in the characters of the 10th or 11th century A. D.
(2) An imperfect stone pedestal, 2½″ high. Two of the faces, which now remain, are adorned with niches enclosing figures of Buddha in the *dharmacakramudrā*.
(3) A similar fragment carved with bas-reliefs of a male human figure, a horse with a rider and a wheel.
(4) Another fragmentary pedestal bearing representations of an elephant, a *cakra*, a horse and a large bird (?)
(5) A portion of a sculpture representing the heads of Śiva and his consort Gaurī.
(6) A small cone of clay with a spiral ornament.

The stream that flows through this garden is that referred to in Hiuen Thsang's account of Kuśinagara, where the Śramaṇa tells the Brāhmaṇ how he had washed Buddha's *pātra* in the pure stream of water at the Veṇuvana-vihāra.[1] The position and approximate size, it should be added, which are assumed on the sketch map for the Bamboo Garden are borne out by some other considerations also. When proceeding on, as we shall presently see, to the Sattapaṇṇi Hall, Hiuen Thsang tells us that it lay to the south-west of the Bamboo Garden, on the northern side of the hill. From this it may be inferred that the garden extended beyond the north-eastern spur of Vaibhāra-giri; otherwise, Hiuen Thsang would hardly have been likely to take his direction from it or to describe the Sattapaṇṇi Hall as lying to the south-west of it. Again, Hiuen Thsang informs us that the Karaṇḍa tank lay 200 paces to the north of the Veṇuvana-vihāra. Now, north of the garden, in the position indicated, there is a deep tank of ancient date, but with only thick black mire at the bottom—at any rate in winter time. This tank there is every reason to identify with the Karaṇḍa-hrada ; indeed, there is no other tank which we could identify with it ; and if we measure off some two hundred paces to the south of it, in order

[1] Beal, *loc. cit.*, II, p. 43.

to obtain the northern boundary of the Bamboo Garden, we shall find that the latter must have been some 250 yards long from north to south.

The cemetery, alluded to by Fâ-Hien, must then be located not far from the south-west corner of New Rājagṛha, in the waste ground to the west of the modern Dâk Bungalow. This is where the Burning-ghāṭ of modern Rājgīr still exists, and where, therefore, in view of eastern conservatism, we should, in any case, be inclined to look for the old *śmaśāna*. In connection with this cemetery, it may be noticed, by the way, that Fâ Hien speaks of it parenthetically. He does not say that he went from the Bamboo Garden to the Pippala stone house by way of the *śmaśāna*. He entered the Bamboo Garden on the south, visited the ruins of the old *vihāra*, and then went westward among the rocks up to the Pippala stone house. That he should have visited the cemetery, half a mile away, between these two places, is obviously unlikely.

As to the *stūpa* of Ajātaśatru, described by Hiuen Thsang as lying to the east of the Karaṇḍa-veṇuvana, if it did in reality lie in that direction, it is possible that its position is marked by a plinth, built in the fashion of the Pippala stone house, which stands near the foot of the Vipula hill behind the Sūraj Kuṇḍ and some 270 yards to the east of the garden. The plinth in question stands about twelve feet high; its western side is intact and measures 45′ long; the other sides are ruined and buried under débris[1]. Fâ Hien, it should be noticed, locates the *stūpa* of Ajātaśatru to the west of new Rājagṛha, and it is obvious that some confusion existed as to its precise position. It is not certain whether Hiuen Thsang intends us to understand that the Emperor Aśoka rebuilt the *stūpa* of Ajātaśatru, but it seems likely that such was the case, and this fact may well have given rise to the confusion, since Hiuen Thsang also appears to ascribe to Aśoka the *stūpa* to the west of new Rājagṛha, which Fâ Hien ascribes to Ajātaśatru. This *stūpa* of Aśoka was located by Gen. Cunningham at a large mound marked H on Plate XXXV,[2] the conformation of the eastern part of which reminded him forcibly of the Jagat Singh *stūpa* at Sārnāth.

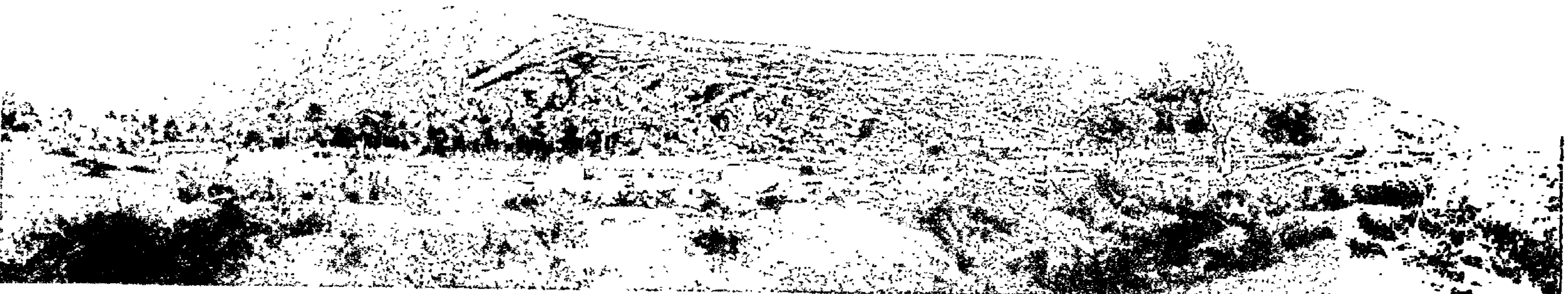
The mound at this end is some 31′ high above the level of the surrounding country. A trench was cut through the greater part of it, and at a depth of some 12 feet we came upon a number of layers of brick of the typical Mauryan type. The discovery, however, of the fragments of a mediæval Jaina statue under the brickwork made it plain that the old bricks must have been used up in the construction of a later building, though it is highly probable that the earlier building occupied approximately the same site. What the nature of this later building was, our trial trenches were too limited to determine. To the north and south of the depression, where the Mauryan bricks were brought to light, were concrete terraces, the uppermost of which was some 3 feet below the top of the mound, the next being about 1 foot below it, and a third some seven feet below the latter. Only a small section of these terraces was laid bare, but it looked as if their plan would be that of concentric circles, with the brickwork above referred to (possibly a pavement) in the centre. Towards the west, the mound slopes away slightly and then rises again, the western eminence being about 20 feet above the surrounding level, and the saddle between about 5 feet lower. This part of the mound and the trench carried through it are shown in Plate XXXVIII, II. In the saddle were found, near the surface, the remains of three mediæval *stūpas*, and three shallow tanks, with slightly sloping walls of brick covered with plaster. The western part of the mound was opened to a depth of 10 feet only. In it were the remains of some brick walls, and in the earth round about and above them were found a number of clay *stūpas*, about 2″ high and 1″ in diameter at their bases.[3]

[1] This suggested identification is due to Pandit Daya Ram.
[2] In General Cunningham's map the mound is shown nearer the south-western corner of the New City.
[3] Note by Pandit Daya Ram.

1.



2.



1. MOUND TO WEST OF NEW CITY SHOWING EXCAVATIONS, FROM NORTH.
2. PANORAMIC VIEW OF VIPULA HILL, FROM NORTH.

The presence of these miniature *stūpas* suggests that a large *stūpa*, the core of which was of earth and débris, was built over the remains of the brick walls mentioned above. Inside each of them was a tiny tablet with the Buddhist formula '*ye dharmā hetu-prabhavā, etc.*' inscribed in characters of the eighth or ninth century. In connection with the find of these little *stūpas* Dr. Bloch has reminded me of the following passage in Hiuen Thsang. "It is a custom," writes the pilgrim, "in India to make little *stūpas* of powdered scent made into a paste; their height is about six or seven inches, and they place inside them some written extract from a *sūtra*; this they call a dharma-śarīra."[1] That such miniature *stūpas* were frequently built into larger ones we know from the discovery of them at other sites.

Sattapaṇṇi Hall.

The identification of the Sattapaṇṇi Hall, in which the first convocation was reputed to have been held and which afterwards acquired such fame in the annals of Buddhism, has been the subject of more writing than anything else connected with Rājagṛha. Yet the accounts of the Chinese travellers, as well as other authorities, are remarkably explicit. Starting from the Pippala cave, Fâ Hien says: "Going on still to the west for five or six le on the north of the hill, in the shade, they found the cavern called Śrataparṇa, the place where, after the nirvāṇa of Buddha, 500 Arhats collected the Sūtras. When they brought the Sūtras forth, three lofty seats had been prepared and grandly ornamented. Śāriputtra occupied the one on the left, and Maudgalyāyana that on the right. Of the number of five hundred one was wanting. Mahākāśyapa was president (on the middle seat). Ānanda was then outside the door, and could not get in. At the place there was (subsequently) raised a tope, which is still existing."[2] Hiuen Thsang's account is equally lucid. "To the south-west of the Bamboo Garden (Vêṇuvana), about 5 or 6 li, on the north side of the southern mountain, is a great bamboo forest. In the middle of it is a large stone house. Here the venerable Kāśyapa with 999 great Arhats, after Tathāgata's *Nirvāṇa*, called a convocation (*for the purpose of settling*) the three *Piṭakas*. Before it is the old foundation-wall. King Ajātaśatru made this hall for the sake of accommodating the great Arhats who assembled to settle the *Dharma-piṭaka*."[3] Further on, Hiuen Thsang tells us that Ānanda, who had been excluded from the assembly and in the meantime had obtained the condition of an Arhat, returned again, and "knocking at the door, announced his arrival" and subsequently "entered through the keyhole." The above accounts appear to leave no reasonable room for doubt as to the identity of the spot pointed out to the travellers as the traditional site of the Sattapaṇṇi Hall; but, before proceeding to discuss their descriptions in detail, it will be as well to review the several theories that have been advanced by previous writers on the subject. (1) The first in the field to attack the problem was Gen. Cunningham, who located the Hall at the Son Bhāṇḍār cave, an artificial excavation in the southern slope of Vaibhāra-giri,[4] about two-thirds of a mile from the Pippala stone house. This position on the south face of the mountain is so manifestly impossible in face of the uniform testimony of our authorities that the Sattapaṇṇi Hall was situated on the

[1] Beal, *op. cit., II.* p. 146.
[2] Legge, *op. cit.*, p. 85.
[3] Beal, *op. cit.*, II, p. 161.
[4] *Ancient Geography*, p. 463; *A. S. R.*, III, 140 sqq.

northern side of Vaibhāra-giri, that we need not stop to consider it further. It may be remarked, however, in passing, that this initial blunder of Gen. Cunningham's led him into several other mistakes, which have already been noticed in connection with the landmarks round about the north gate of the city.[1] (2) The next identification of the Sattapaṇṇi Hall was hazarded by Mr. Beglar,[2] who fully appreciated the insuperable objections to Gen. Cunningham's theory, and rightly insisted that the Hall must be looked for on the northern side of the Vaibhāra Hill. He himself proposed to locate it at a spot on the hillside a little less than a mile south-west of the Pippala House, where he found some natural fissures in the rock facing the west. The position suggested by Mr. Beglar is undoubtedly somewhere near the right one, but, unfortunately, no one since his day has been able to trace the recesses in the rock described by him, and we ourselves searched the side of the hill time after time with as little success as those who had gone before us.[3] (3) In 1899 the question was again taken up by Dr. M. A. Stein, who made a brief visit to Rājgīr in the course of a tour through South Bihar and Hazārībāgh. The caves which Dr. Stein fixed upon as the traditional site of the Sattapaṇṇi Hall, are situated in the rocky scarp of Vaibhāra-giri, just below the Temple of Ādinātha, from which they take their name. They are two in number, spaced at a distance of about 50 feet from each other, and in front of them is a narrow terrace supported on a retaining wall. Put briefly, Dr. Stein's argument in favour of his identification is that the position of the caves in question "corresponds close enough to the indications which the Chinese pilgrims give as to the traditional site of the First Great Council", and that there are no other caves, natural or artificial, known to exist along the northern face of the mountain in the position indicated. The second and negative part of this argument is true enough, but anyone, I think, who studies the question on the spot will find the objections to Dr. Stein's identification insuperable. First, as to the position of the Sattapaṇṇi Hall. The two Ādinātha caves are reached by climbing up to the summit of Mt. Vaibhāra, and then descending by a narrow footway over the edge of the cliff. But neither in Fā Hien's nor in Hiuen Thsang's account is there anything to suggest that they climbed to the top of the Vaibhāra Hill, in order to reach the Sattapaṇṇi Hall. On the contrary, if we compare the accounts of their visits to other monuments, which could only be reached by such an ascent as this, we must conclude that there was no

[1] We can hardly expect to find the Son Bhāṇḍār cave mentioned at all by the Chinese, as it always has been and still is a sanctuary of the Jainas. The inscription in two lines, written in characters of the third or fourth century A. D. at the right side of the door leading into the cave, proves this conclusively. It reads as follows (metre : *Upajāti*) :—

(*l. 1*) [illegible]

(*l. 2*) [illegible] *ṣṭhe*[1*]

vimuktaye=kārayad=dīrgha (?)-*tejā* [*ḥ* 11*]

We learn from this inscription that a certain Muni Vairadeva made two caves, in which he placed images of Arhats. The reference to 'images of Arhats,' or, as we would now call them, 'statues of Tīrthaṁkaras', points by itself sufficiently clearly to Jainism. And, moreover, from the fact that the donor of the cave is called a *muni* and not a *bhikṣu*, as the corresponding Buddhist term used to be, as also from his name *Vairadeva*, it becomes evident that he was a Jaina himself. For *Vairadeva* is a Prākrit word, and in Sanskrit it should have been *Vajradeva*. *Vaira* or *vaïra*, however, for Sanskrit *vajra* are peculiar to the Jaina Prākrit.

As an additional confirmation of this purely linguistic agreement we may mention that the lower half of a small naked male figure, doubtless an image of one of the Jaina Tīrthaṁkaras, still can be seen cut out of the rock, close to the inscription. [T. B.]

[2] *A. S. R.*, VIII, pp. 90 sqq.

[3] *Cf.* M. A. Stein in *I.A.*, Vol. XXX, 1901, pp. 58-59. Mr. Beglar's identification seems altogether too imaginative to be taken seriously.

occasion for much climbing to reach the Sattapaṇṇi Hall ; and, in the case of Hiuen Thsang's narrative, there is direct evidence to show that the Sattapaṇṇi Hall was not approached from the summit of Vaibhāra-giri. For Hiuen Thsang has already recounted his ascent of that hill and has returned to start afresh from the north gate of the mountain city, first going west along the north face of Vaibhāra-giri, and then east along Vipula-giri. If, then, the Sattapaṇṇi Hall was where Dr. Stein locates it, would it not be natural to expect Hiuen Thsang to describe it in connection with the summit of Vaibhāra-giri, and not after he has returned to the base of it and started afresh along the north face ? But still more insurmountable objections to the identity of either of the Ādinātha caves with the Sattapaṇṇi Hall will appear from a consideration of the character of the caves themselves and the platform in front of them. The caves are, as may be gathered from a perusal of Dr. Stein's own description of them, nothing but low and narrow caverns, naturally formed in the rock, while the terrace in front of them is nothing but a narrow ledge, averaging some 7 yards in width, with a retaining wall at its outer edge, and below it, the steep and precipitous sides of the cliff, up which no approach exists or is ever likely to have existed. That the great Sattapaṇṇi Hall, capable of holding 500 people, could have been built on this narrow little terrace, or that this could have been pointed out to the Chinese pilgrims as the traditional site of such a Hall is incredible ; nor, indeed, is it easy to believe that, if any structure at all had been built against the face of the rock at this point, all traces of it would have been so effectually obliterated. But the large stone house, where the Council was held, is not the only structure for which room has to be found on this tiny ledge. In front of the Hall, Hiuen Thsang tells us that he saw an "old foundation wall" ; this wall, too, has to be fitted in. And, then, where is the *stūpa*, which marked the spot where Ānanda sat outside the Assembly, to find a place on the ledge ? This *stūpa*, we are told, was outside the Hall to the north-west.[1] But north-west of the terrace there is only a precipitous hill side and the plain stretching far down below us ! Enough, however, has probably been said to show that Dr. Stein's theory must be discarded along with those of Gen. Cunningham and Mr. Beglar, and we may now return to consider in more detail the accounts of the Chinese pilgrims as to the character and location of the Hall.

The mistake which, it seems, has hitherto been made in trying to identify the site of the Sattapaṇṇi Hall, has been to assume, at the outset, that what the Chinese pilgrims saw was a cave, natural or artificial, in the side of the hill, with remains of ancient structures in front of it. Now, if we refer to the translations of Hiuen Thsang's narrative, we shall see that there is no mention in them of any cave whatever. We read only of a *large stone house*, which, Hiuen Thsang tells us, was built by Ajātaśatru, and of an old foundation wall in front of it. That by a *large stone house* is meant a structural edifice, is manifest from the use of the same expression in connection with other monuments at Rājgīr. Thus the same words[2] are used of the Pippala Stone House, which fortunately can be identified with certainty and which we know to be a structural building. Again, in the account of Mt. Gṛdhrakūṭa, we read of a *great stone house*, by the side of the cliff, to the south of the *vihāra*, and a little

[1] Beal, *loc. cit.*, II. p. 164.

[2] We rely here upon the translations of the Chinese.

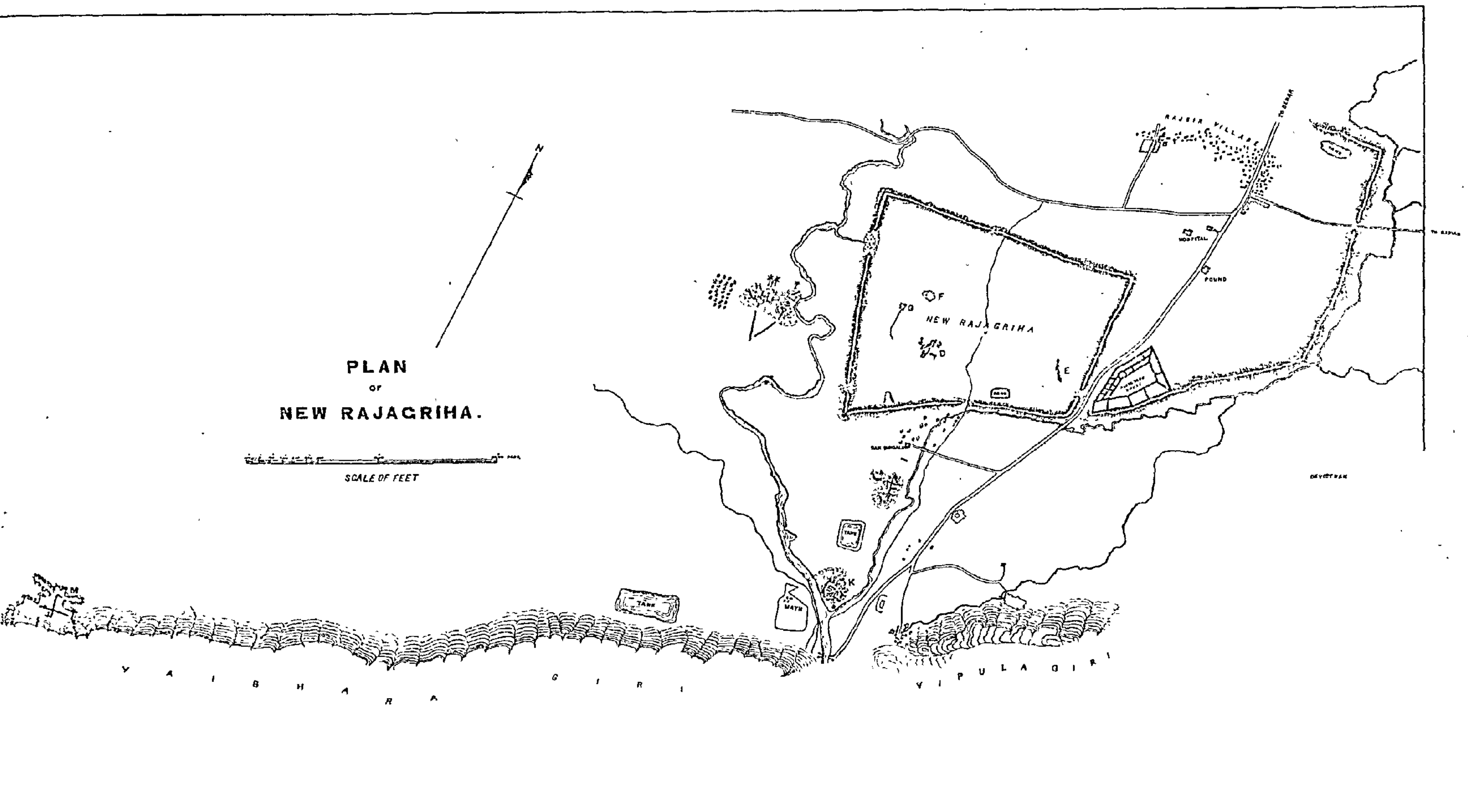
further on, of several *stone houses*.[1] In all these cases, it can conclusively be demonstrated that Hiuen Thsang intended us to understand stone structures and not caverns in the rock. On the other hand, the Cave of the Asura, which is also known to us, is plainly called a cave by Hiuen Thsang's translators and not a stone house. In the translations of Fâ Hien's narrative, on the other hand, it is apparent that, when we read of a *cave*, as, for instance, in the case of the "Pippala Cave," which is proved by Gen. Cunningham's identification to be a stone house, we *may* and in many instances *must* understand the writer to mean a stone structure.

With this point settled, then, we may now proceed to follow the directions of the Chinese pilgrims in looking for the remains of the Sattapaṇṇi Hall, and in doing so we must bear in mind that the building, or the ruins of it, which they had pointed out to them, was not an insignificant little structure, but one capable, in their eyes, of holding a vast assemblage of men.[2] Walking along the north face of Vaibhāra-giri from the Pippala House towards the west, there is no sign, on the steep hill-sides, of any accessible plateau, on which room could possibly be found for such a building; but at a distance of a little over a mile—corresponding to the "5 or 6 li" of the Chinese travellers—the hill puts out a small spur, shown at *d* on Plate XXIX, and at *m* on Plate XXXV. This spur was covered with jungle when I first visited it, but it was easy to see that the top had been artificially built up and levelled, that broad ramps had been made on each side to give approach to it, and that there were remains of massive walls around the edges of the plateau. Later on, I had the jungle cut down and examined the floor of the plateau by sinking the shallow trenches indicated on the plan on Plate XXXV. This examination disclosed the fact that there was a definite line of demarcation running across the plateau from east to west, the area to the north of it being paved with a layer of small pebbles approximately 2″ thick, laid on a bed of clay $5\frac{1}{2}''$ thick. This area, in the front part of the plateau, we may take to have been an unroofed space in front of the building, which lay back against the hill side. On the sides of the platform and along its front face, are the remains of walling of great unhewn blocks, similar to that found in the Pippala stone house and in the fortifications of the ancient city. But the heaps of huge tumbled stones concealing much of the site make it impossible to determine what precisely was the size or shape of the old building; and it would, of course, be mere waste of time to hazard surmises as to the arrangement or construction of the interior. This much, however, is obvious, that the ruins are those of a large and spacious structure, belonging to a prehistoric date, and that it needed no faith on the part of the Chinese travellers to believe that this was the building where the first Council was held. Whether such a Council ever was held and whether it took place at this spot, are questions apart; that this was the traditional site of it pointed out to the Chinese travellers, need not for a moment be doubted.

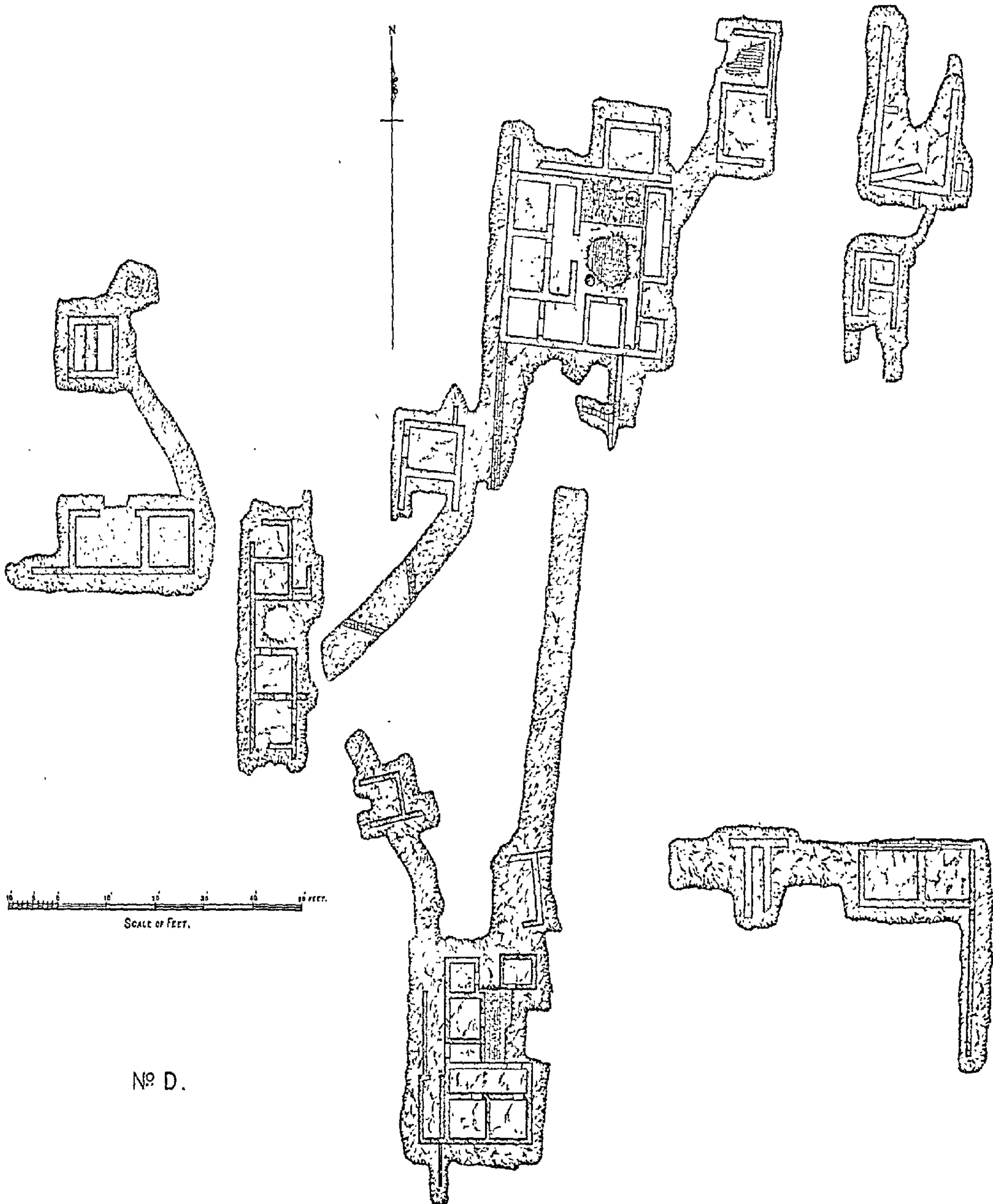
No small antiquities, it may be noticed, came to light here except a spindle-whorl and a small toothed-wheel of copper.

[1] Dr. Stein assumes that a "cave" is signified by the words "stone house" used by Hiuen Thsang's translators, and he cites this case on Gṛdhrakūṭa Hill among others. But the facts are diametrically opposed to his view, as he must have seen had he explored the Gṛdhrakūṭa Peak.

[2] Cf. *Cave Temples of India*, p. 49, note 2, where it will be seen that Mr. Fergusson and Dr. Burgess take the same view about the Sattapaṇṇi Hall having been a large structural building.


PLAN
OF
NEW RAJAGRIHA.
SCALE OF FEET
N
NEW RAJAGRIHA
RAJGIR VILLAGE
TO BEHAR
HOSPITAL
POUND
TANK
MATH
VAIBHARA GIRI
VIPULA GIRI
F
G
D
E
K
M

EXCAVATIONS AT RAJGIR.



Trial Excavations in New Rājagṛha.

(*Note by Pandit Daya Ram.*)

The area represented by F, on the plan of New Rājagṛha, was occupied by a mound about 100′ in diameter. Its top rose to the height of about 6′ above the general level of the plateau known as the New Rājagṛha. All the structures laid bare in this area appear to be ordinary dwelling houses or chambers, which arrange themselves on three distinct levels, the lowest or oldest (*c*) being about 8′ below the average level of the plateau, the next (*b*) about 2′ 9″ below the surface, and the highest (*a*) on or near the surface. The only structure found on the lowest level is a square cell, measuring 6′ 3″ along each side internally. The bricks, of which it is composed, are 11″ long, 8″ wide, and 2½″ thick. The cell yielded three inscribed tablets of unburnt clay, one of which is impressed with a few Brāhmī characters of the first or second century B.C.

On the middle level was found, at the northern end of the area F, a house measuring 36′ 9″ square externally, the whole of which was exposed, with the exception of a small portion at the north-east angle. The foundations of the outer walls are 5′ 9″ below the level of the plateau, but those of the walls in the interior are laid some 2 feet higher up. The outer walls are generally 15″ to 16″ in thickness, the rest about 11½″ thick. The construction of the walls is somewhat remarkable. The bottom layer of the foundations consists of small rough stones. For the next few feet, *i.e.*, to a height of about a foot above the level of the floor inside, the walls are built of slabs of slate, just wide enough to cover the thickness of the walls. The superstructure is entirely of bricks, of which only two sizes were noticed on this level, the one being 15″ × 10″ × 2 ″, the other 11″ × 8″ × 2½″. The former of these sizes is used in the outer, the latter in the inner and thinner walls.

The entrance of the building presumably lies buried in the unexcavated portion mentioned above. There was a paved court in the centre and a single narrow chamber along the east side. On the west side of the court are three rooms, the two southern ones furnished with a verandah in front. The latter was entered from the court by a door, 3′6″ wide, situated in the middle of the front wall, and the chambers by openings somewhat narrower. On the south side, there are four rooms, the two western ones being only about 4 feet wide. Of these, the western one contained what appeared to be a granary made up of earthen rings about 2 feet in diameter and about 5 feet deep. It was found covered up with a stone-slab, but inside only earth was found.

Two more chambers built in the same style and of the same material were found on the middle level, immediately to the south of the building described above.

The highest level is represented by a platform, composed of brickbats, occupying a portion of the northern one of the two chambers noticed above, a drain adjoining it on the east side, a brick platform near the south-west corner of the large building, another platform made up of brickbats and some fragmentary walls towards the northern and western extremities of the area..

Most of the structures unearthed in the areas D, E and G, belong to the second or middle level observed in F. Of the buildings found in D, those standing at the northern and southern ends of the area are fairly complete, and have a strong resemblance in design to the house in F. There is the same brick paved court in the centre, and chambers with or without verandahs on the sides. The chambers occasionally open outside. The walls are either 15″ to 16″ or 1 foot thick, and now stand from 1 foot to 2½ feet in height. In the second chamber from the west of the east row of the northern building, was found a granary similar to the one found in F, and close to it, about 2 feet below the floor, an ancient well built of wedge-shaped bricks. The other structures shown in plan D, are portions of dwellings, the remainders of which are still hidden under the plateau.

Among the buildings in G trench, a brick paving came to light near the surface of the plateau, and two rectangular rooms on the same level as the buildings in D, to which they are similar in style and material.

A low mound, situated some 40 feet west of F, was also opened up for a few feet, but yielded nothing. In a long trench started some 120 feet west of the southern portion of D, was found, at the depth of 8 feet below the level of the plateau, a chamber, measuring 11′×6′ 6″. Its walls are composed of alternating courses of stone, rubble, and slabs of slate.

As regards the age of the buildings described above, it is impossible as yet to predicate anything with certainty, for no architectural or other features of a representative character have come to light. The lowest stratum revealed two clay seals, bearing short illegible epigraphs in characters of the first or second century B.C., and may, perhaps, be assigned to about that period; but the antiquities associated with the upper levels were too promiscuously mixed up to allow of any conclusions being drawn from them. The following antiquities deserve a special notice:—

LOWEST LEVEL—

(*a*) Two circular tablets of unburnt clay. The legends on them, inscribed in the Brāhmī character of the first or second century B. C., are quite illegible.

(*b*) Terra-cotta bird with extended wings.

(*c*) Three porcelain beads with ribbed sides.

(*d*) Six copper coins of the same pattern—

Obv.—Elephant standing.

Rev.—Tree surrounded by a rail.

UPPER LEVEL—

Coins.—

(*a*) Square copper coin of the Punch-marked type.

(*b*) Copper coins of Ibrāhīm S͟hāh of Jaunpur, Islām S͟hāh of the Sūrī dynasty, Akbar and S͟hāh 'Ālam II (dated A. H. 1195=1780 A.D.)

Other metallic objects.

(*a*) Silver bangle.

(*b*) Brass statuette of Bāla-Kṛṣna, crawling.

(*c*) Much rusted iron blade of a dagger.

Terra-cottas.

(*a*) Round seal inscribed with the name Jinarakṣitasya 'of Jinarakṣita' in Gupta characters.

(*b*) Clay seal with the Buddhist creed.

(*c*) Oval clay seal, stamped with the Buddhist symbols *svastika*, *triratna*, *bodhi* tree, deer, etc.

(*d*) Tablet bearing a wheel in the midst of flying geese.

(*e*) Tablet with the figure of a *makara*. The back shows marks of a string.

(*f*) Fragment of a clay seal with a floral design.

(*g*) Triangular tablet of baked clay, representing a man and a woman worshipping a tree in a railing.

(*h*) Fragment of a tablet representing a well-dressed female. Her left hand rests on the waist, while the other one hangs low.

(*i*) Bust of a figurine wearing necklace and bangles.

(*j*) Nine clay heads.

Sculptures.

(*a*) Four small stone Buddha heads.

(*b*) Tablet of slate representing the Buddha in *dhyāna-mudrā*.

(*c*) Headless seated image of a sage in *dhyāna-mudrā*.

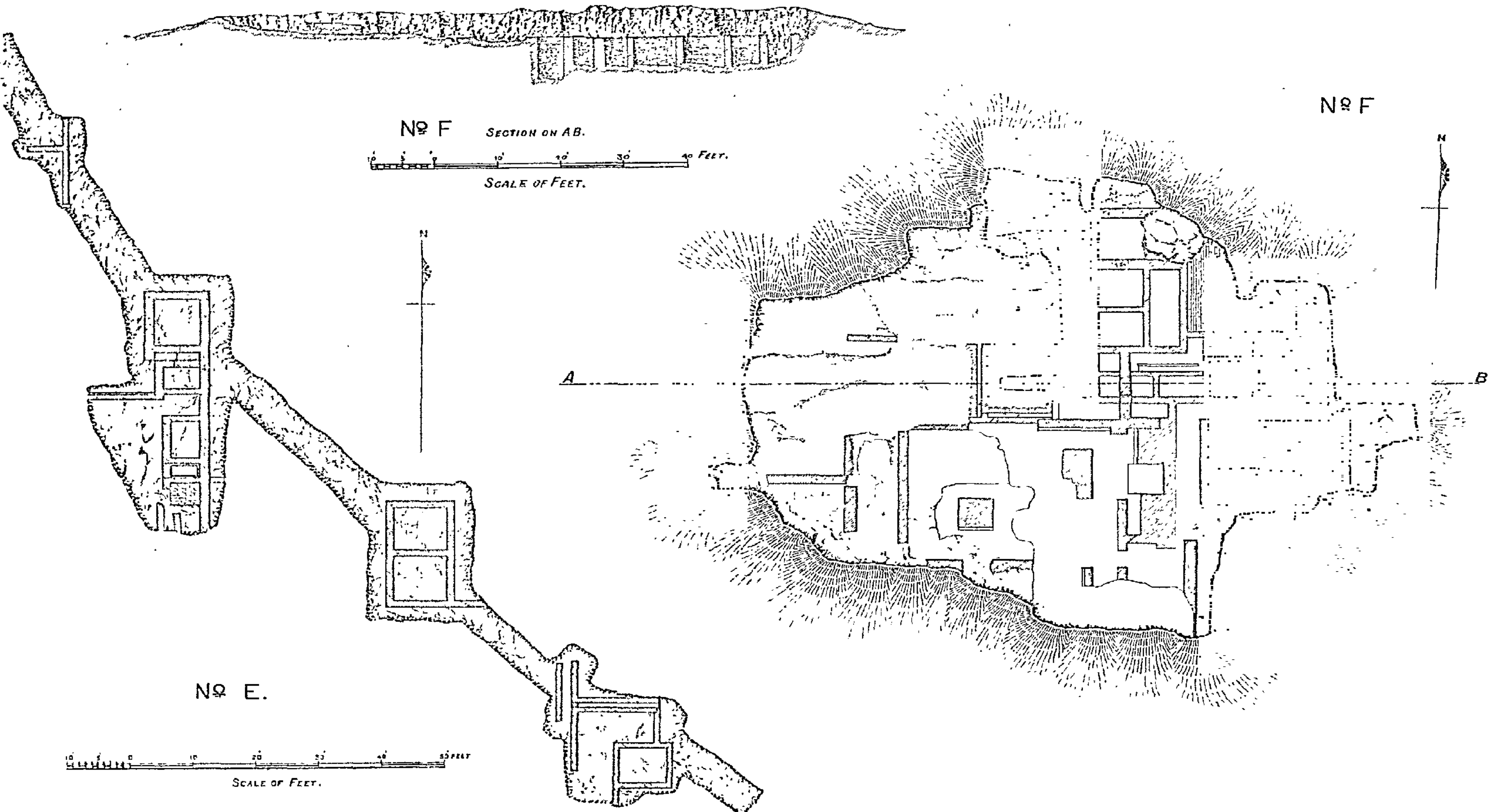
(*d*) Headless figure of a *gandharva*.

(*e*) Another *gandharva* in blue stone.

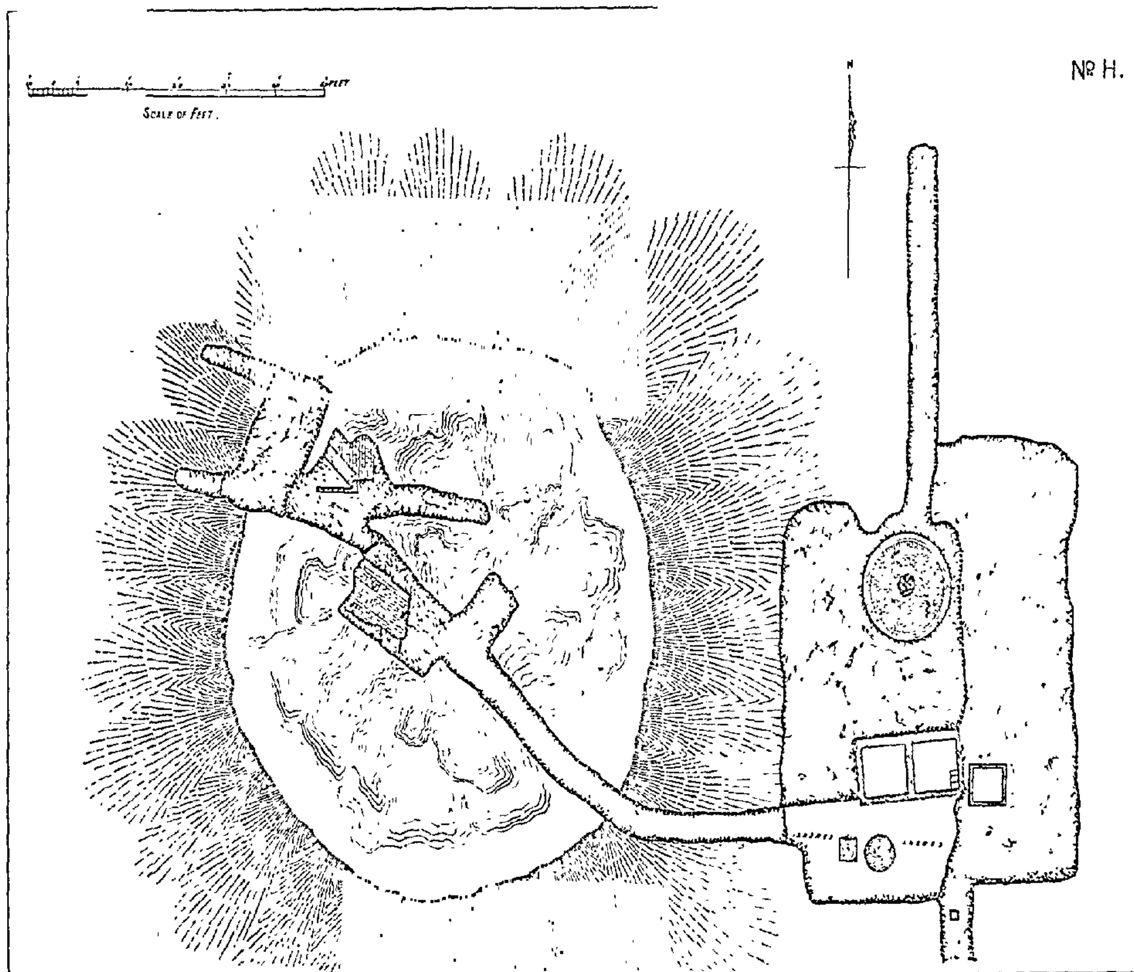
(*f*) Fragment of a halo representing a *gandharva* in a trefoil arch.

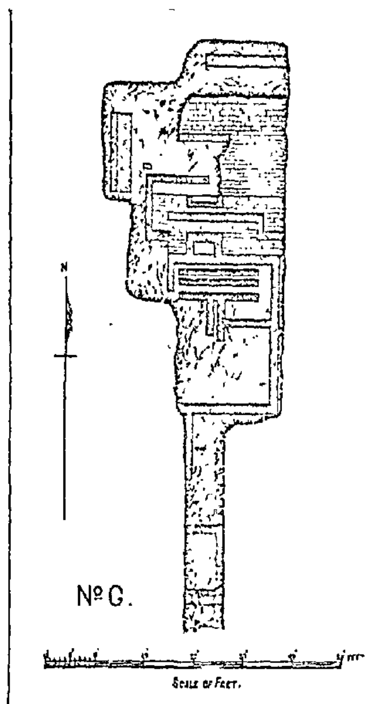
(*g*) Carved lid of a casket.

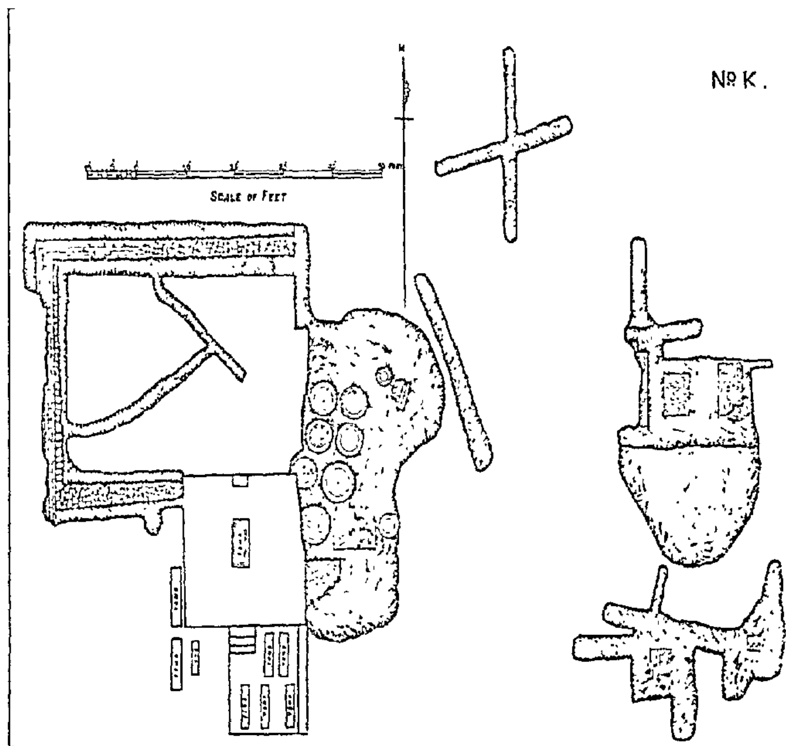
EXCAVATIONS AT RAJGIR.



EXCAVATIONS AT RAJGIR.



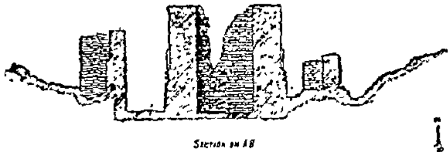




Excavations at the Maṇiyār Maṭh.

(By Dr. T. Bloch.)

'Maṇiyār maṭh' is the name given to a small shrine built on the top of an artificial mound close to the centre of the wide, mountain-girt plain of old Rājagṛha. It stood out conspicuously from a distance, and owing to its white colour attracted at once the eye of a visitor. That the mound, upon which it stood, had been formed by the *débris* of some older structure was easy to see, and in order to examine the remains beneath, a trench was dug, approaching the mound from the east. On the second or third day this cutting revealed a massive masonry structure, with well-preserved stucco-images around it. These figures were about two feet high, and could easily be recognised as images of Gaṇeśa and *nāgas*, or serpent-deities, coupled with a *liṅga* bearing a garland of flowers over its top.



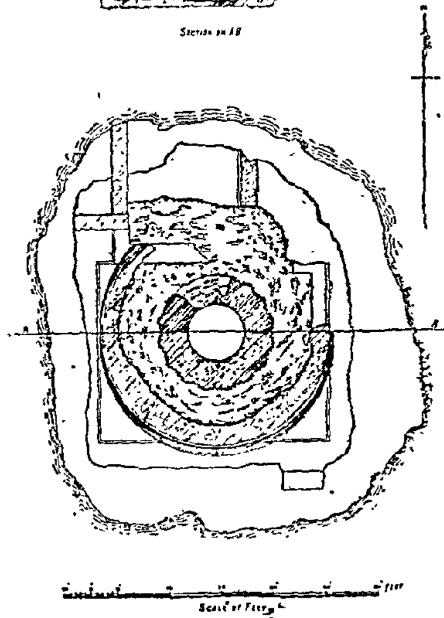


Fig. 2.

To lay open the entire circumference of this interesting old masonry structure, it became necessary to remove the modern white-washed shrine on the top of the mound. Its foundations covered a little more than the western half of the old masonry building beneath it, and it would have brought down by its pressure the older structure below, if it had been allowed to remain standing. The shrine, I may note, was in a tumble-down condition, and I had satisfied myself that it was no longer used as a place of worship either by the Jainas, or by any other Indian sect, and that there was no antiquarian interest or value attaching to it. Indeed, in pulling down the building, I found concealed, inside the masonry of its roof, a small image of a seated *nāga*, with an inscription bearing the date Saṁvat 1547, along with a basalt slab, bearing the representation of two human feet on it. This latter, *caraṇapāduka*, as it would be called now, has an inscription, which tells us that it was put up in Saṁvat 1837, on the fifth day of the bright half of Māgha, by a certain lady Bībī Sītābāī, the wife of Motīlāl, who was the son of Keśavadāsa, and that it represented the feet of the Nāga Sālibhadra.[1]

It is evident that this stone had originally been placed inside some older shrine, and that the modern Maṇiyār maṭh must thus have been still considerably later than Saṁvat 1837, or 1781 A.D. I accordingly felt confident that my action in demolishing it could not be open to any reasonable criticism.

After the entire circumference of the structure down to its base had been laid open, it was protected by a conical tile-roof, and the building now bears a certain structural resemblance to the temples of Vesta at the Bocca della Verita in Rome and at Tivoli. Of course, I do not for a moment pretend this to have been its original shape. How the building was originally finished off, it is now impossible to say; probably the top was hemispherical like the stūpa domes. A number of carved tiles found among the *débris* show that the roof rested on an ornamented drum, of which a small portion still remains in one place. The interior of the structure was emptied down to the bottom, but was found to contain nothing but earth mixed with ashes, the remains, perhaps, of some wooden parts of the original building. Mixed with the ashes I found a few fragments of late statuary. The thickness of the old masonry walls is about 1 foot 4 inches.

[1] *Samvat 1837 varṣe māse māhaśudi 5 tad-dine Srī-Osavāla-vaṁśe Vīrānī-gotre Kesodāsa tasya Motīlā ḷakasya*bhāryya bībī Satābo (sic!) Rājagāhe nagasya Sālibhadrajīkasya caraṇa sthāpita.*

The stucco-images around the base are arranged in niches divided by pilasters. The stucco-plastering breaks off abruptly just a little above these niches, and no further traces of it remain higher up on the walls. This looks as if the upper portion of the building had been standing out in the open considerably longer than its base; and we probably owe the preservation of the stucco-images around the base to the fact that they had been buried by *débris* at a comparatively early time. For their fabric is very fragile. It consists merely of a mixture of cement with small pebbles, and, but for the protection afforded to it by the covering of earth and *débris*, we could hardly have expected to find it so singularly well preserved.

Following the direction in which the stucco-images have been unearthed, *i. e.*, from east to south, or, to use a well-known Indian expression, 'making the *pradakṣiṇā*' around the temple, we find the figures arranged in this order:—

(1) *Liṅga*, covered with a garland of flowers, standing on circular base, moulded in the shape of a flower-pot.

(2) *Bāṇāsura*,[1] standing; four arms; two upper hands cut off; two lower ones resting on shoulders of small male and female attendants. Crown on head; hair arranged in curls; garland over left shoulder. Conventional rock-work on base points to his residence in hills.

(3) *Nāga*. Head covered by cobra with five hoods; left hand falls down holding undefined object, like a *śaṅkha* or shell; uplifted right with rosary.

(4) *Nāga*. Cobra with many hoods over head; left hand, resting on hip, holds water-pot; right hand hangs down with palm opened (*varadamudrā*).

(5) *Nāgī*. Cobra with three (or five?) hoods over head; right hand uplifted; left hand hangs down.

(6) *Gaṇeśa*. Seated on rocks; holds mango (?) in his right hand; both upper arms wear bracelets; strings of beads around neck and forehead; three-headed cobra twisted around his body.

(7) *Nāga*. Erect; head covered by cobra with three hoods; uplifted right hand holds rosary; left hand hangs down.

(8) *Nāga*. Erect; head covered by cobra with one hood; gesture of uplifted right hand-*vitarka-mudrā*; left hand resting on hip.

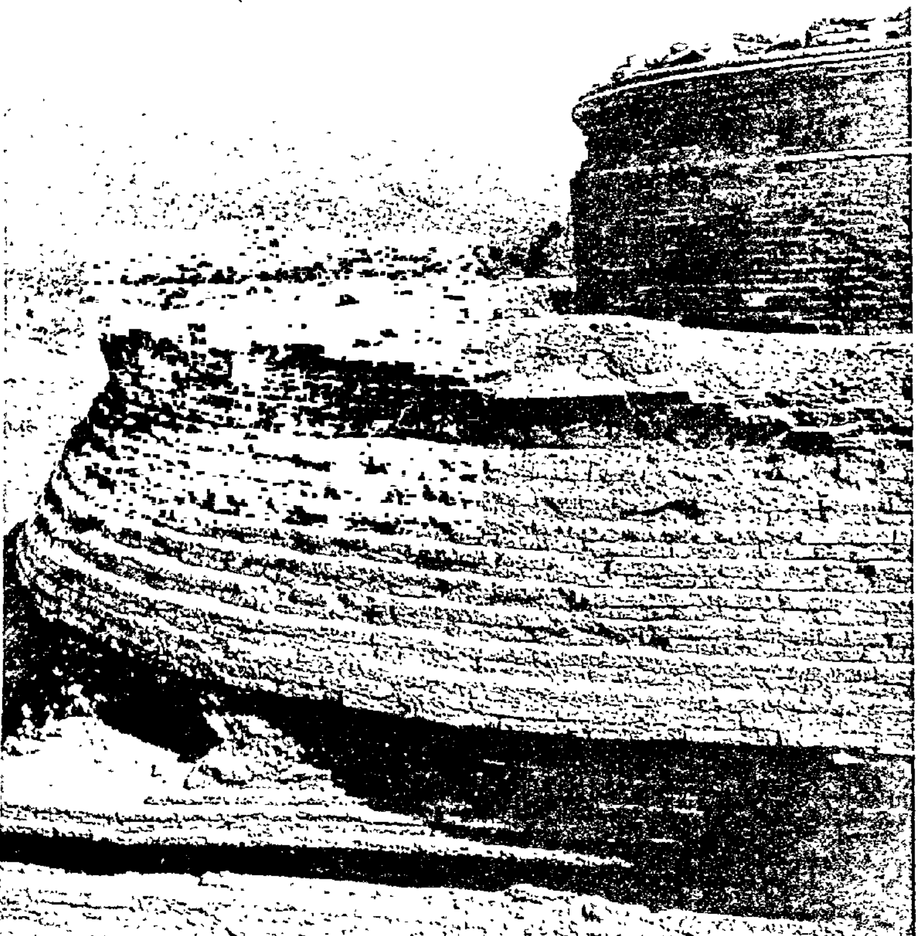
(9) *Nāga*. Erect; cobra with three hoods over head; left hand hanging down; right hand raised.[2]

(10) *Śiva*. Dancing; six arms; wears cobra and tiger-skin; phallic emblem distinctly visible.

It will be observed that among the divinities in the list, there is one at least, Bāṇāsura, whose name occurs in connection with the Kṛṣṇa legends. Kṛṣṇa once had a fight with him, because he had refused the hand of his daughter to the divine hero, and it was in this fight that Bāṇāsura lost two of his hands. Now, considering the intimate connection that exists between the Kṛṣṇa legend and old Rājagṛha, it is perhaps not too hazardous to suggest that the building unearthed, situated almost right in the centre of the old city, was some kind of *Pantheon of Rājagṛha*, and that the various figures of *nāgas* and *nāgīs* represent certain serpent-deities, whom popular religion worshipped at distinct places on the surrounding hills. The fact that some of the divinities have been represented as inhabiting hills, to which we have drawn special attention in the list above, fits well into this argument. Old ruined temples of Gaṇeśa and Śiva (Mahādeva) still remain on Vaibhāra-giri, and it is merely owing to our imperfect knowledge of Hindu mythology, that we have been constrained to describe the six serpent-deities in the list merely as *nāgas* or *nagīs*, without calling them by their proper names. One among them very likely is the *nāga Maṇikāra*, whose name still survives in the modern world *Maṇiyār maṭh*, by which the locality now goes.

[1] The above explanation, which seems very plausible, has been given to me by one of my Hindu servants. It is based on the fact that the figure is represented with two hands cut off. This was done to Bāṇāsura by Kṛṣṇa in the fight for his daughter.—T. B.

[2] This figure has been slightly damaged since the excavations.



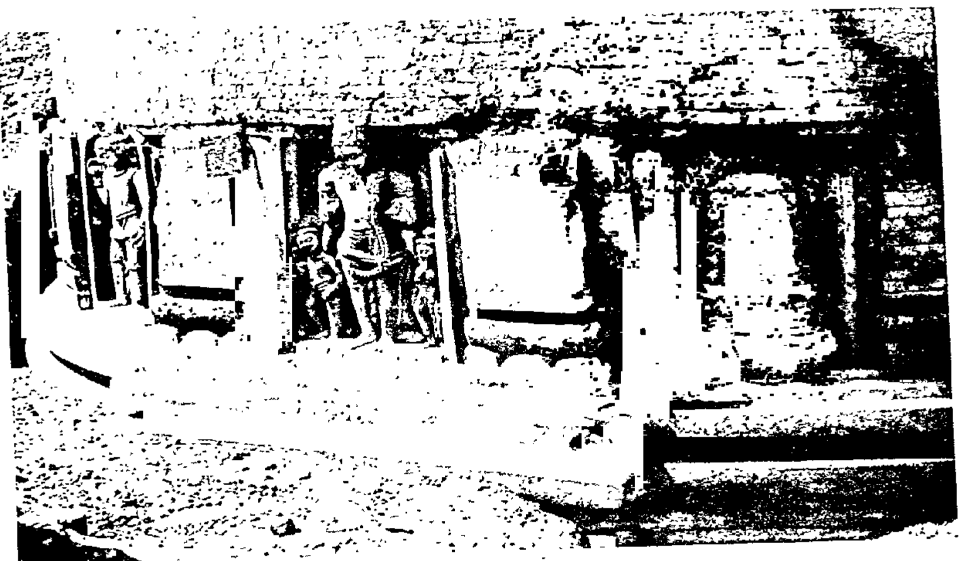
1. MANIYAR MATH: CIRCULAR STRUCTURE WITH SURROUNDING WALL.

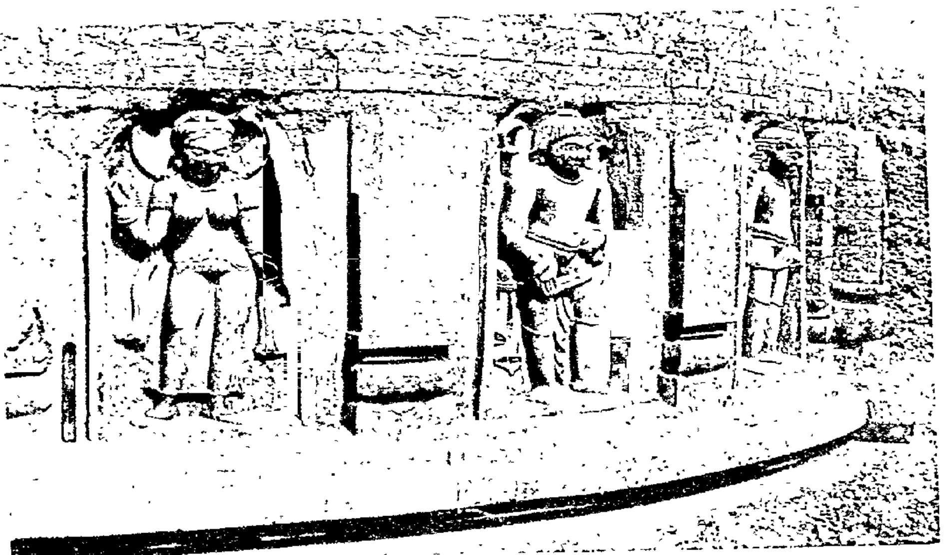


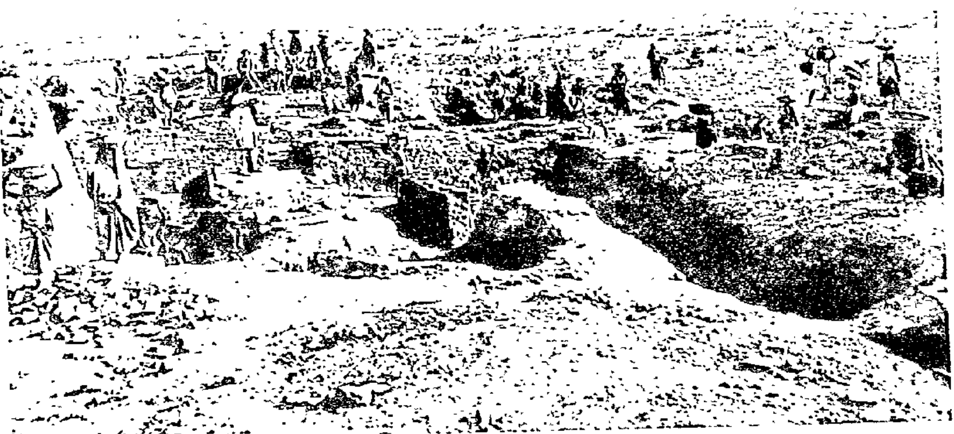
2. MANIYAR MATH: IMAGE OF GANESA IN STUCCO AROUND BASE OF CIRCULAR STRUCTURE.

EXCAVATIONS AT RAJGIR.

1


2


3


4


1. MANIYAR MATH: SHOWING POSITION OF RELIEFS ON INNER STRUCTURE.

2. THE SAME: FIGURES OF LINGA, VISNU (?) AND NAGA.

3. THE SAME: FIGURES OF NAGI AND TWO NAGAS.

4. EXCAVATIONS AT F IN FORT OF NEW CITY.

Later tradition looked upon the building as a well into which was hidden the wealth of some mythical king. Maṇikāra had been appointed the guardian of this treasure-house, and the Hindus accordingly worshipped him here, while the Jainas set up a shrine to Śālibhadra, of whom they tell us that he buried his treasures inside a well.[1] This tradition very likely is not far from the truth. We may well imagine that the old temple, whose date, on account of the style of the stucco-figures around its base, we put within the flourishing time of the reign of the early Gupta kings, say between 350 and 500 A.D., was erected at a place, where popular tradition told of treasure hidden by one of the mythical kings of Rājagṛha. The great prevalence of *nāgas* among the guardian figures around the temple points distinctly to this. For, as we need scarcely mention, in India as elsewhere, the serpent gods keep watch over wealth concealed below the earth.

It will be observed that in the above account, Dr. Bloch makes no reference to the two concentric walls of which this strange monument is composed (*cf.* fig. 2 and Plate XXXIX, 1). The inner circle of wall is all but intact, at least on its inner side, and there is no trace of any opening ever having existed in it to give access to the interior of the structure. I gather from this and other details that, in its general form, the monument resembled a Buddhist *stūpa*, the interior being filled with earth or *débris*, and I would explain the presence of the few fragments of late sculpture found inside, on the hypothesis that at some relatively late period, when the building had fallen to decay, the interior was excavated for the sake of treasure—a fate which, we know, befell many a monument of this kind in India and Burma. The original building consisted only of the inner wall with the platform around it, the outer wall being added at some subsequent date, when the ground around the original structure had risen. This is manifest from the higher level at which the foundations of the outer wall are constructed over the earlier platform, and also from the fact that the inner face of the outer wall was left quite rough and was, obviously, never intended to be exposed to view. The same phenomena precisely are observable in the case of many Buddhist *stūpas*, where we find each successive shell added on at a higher level than the one preceding it, and where, of course, the inner face of each shell is left rough, the space between it and the previous one having been filled with *débris*.

As to the character of this unique monument, I am myself inclined to regard it as a colossal *liṅga*, its conventionalised form and details being suggested or influenced by the Buddhist *stūpas* round about it. And I would point, as a parallel, to a colossal *liṅga* at Fatehgaṛh, near Baramula, in Kashmir, which is also decorated with figures carved in relief around it. One might also cite the Tiruparakunrum rock, near Madura, as an example of a *liṅga* on a much larger scale than the Maṇiyār maṭh Monument.

In conclusion it remains to mention a find of some interest made in the old city at some distance to the north-east of the Maṇiyār maṭh. This was the pedestal of a large statue of red Agra sandstone, which was discovered built into the bottom of a

[1] Another legend has been referred to by Broadley, *l. c.*, p. 73, where he speaks of Dhānāji and Sathradrāji, corruptions from Dharmanātha and Śāntinātha, as he takes them to be. He adds that the modern *pūjāris* describe them 'as two wealthy bankers, who lived in the house of Nirmalkuṇḍ, *i.e.*, the mound in the south-west corner of the ancient city.' Evidently the Maṇiyār maṭh is meant by this house. Several Jaina pilgrims, who watched us excavating the ancient temple, told us that they had long ago known of its existence from their *Śāstras*. The fact that the stucco-images around the temple contained clear representations of Gaṇeśa and Mahādeva did not seem to puzzle them in the least.

drain in the walls of a rough square structure, which now does duty as a cattle-pen. Only the feet, unfortunately, remain on the pedestal, but in front of it are some characters in the early Kuṣaṇa script, enough of which survive to fix at any rate with certainty the approximate date of the monument, though the greater part of the epigraph is too defaced to be intelligible. That the statue emanated from the Mathura school of sculpture there can be no doubt, and it seems very probable that it was produced at approximately the same time as the two similar statues of red sandstone found at Śrāvastī and Sārnāth, and it may even be surmised that it was dedicated by the same person.

J. H. MARSHALL.

THE DHAMNĀR CAVES AND MONOLITHIC TEMPLE OF DHARMANĀTHA.

THE caves of Dhamnār form a little-known group situated in His Highness the Holkar's territory, about halfway between Koṭāh and Ujjain in Central India. Formerly very difficult of access, they are now easily reached from the station of Shāmgarh on the new Nāgdā-Muttrā railway, from which place they are only thirteen miles distant, due west, a made road, just completed, linking them up with the railway. The road actually terminates, at present, at the village of Chandvāsā, which is within two and a half miles of the caves, where there is a recently constructed State Public Works Department bungalow.

The late Colonel Tod, for sometime Political Agent to the Western Rajput States, supplies us with the first description of the caves, having visited them in 1821. As he arrived at the caves the country reminded him of Mewār, having the same agreeable undulations of surface and a rich soil, which was strewn throughout with agates. In his account[1] he goes on to say "As we approached the object of our search, the caves of Dhoomnar, we crossed a rocky ridge covered with the *dhak* jungle, through which we travelled until we arrived at the mount. We found our camp pitched at the northern base, near a fine tank of water; but our curiosity was too great to think of breakfast until the mental appetite was satiated.

" The hill is between two and three miles in circumference; to the north it is bluff, of gradual ascent, and about one hundred and forty feet in height, the summit presenting a bold perpendicular scarp, about thirty feet high. The top is flat and covered with *burr* trees. On the south side it has the form of a horse-shoe, or irregular crescent, the horns of which are turned to the south, having the same bold natural rampart running round its crest, pierced throughout with caves, of which I counted one hundred and seventy; I should rather say that these were merely the entrances to the temples and extensive habitations of these ancient Troglodytes. The rock is a cellular iron clay, so indurated and compact as to take a polish."

This account fairly describes the site and surroundings of the caves, but his estimate of the number of them seems to be rather high, unless he counted the small subsidiary cells as separate excavations. The late Dr. James Fergusson

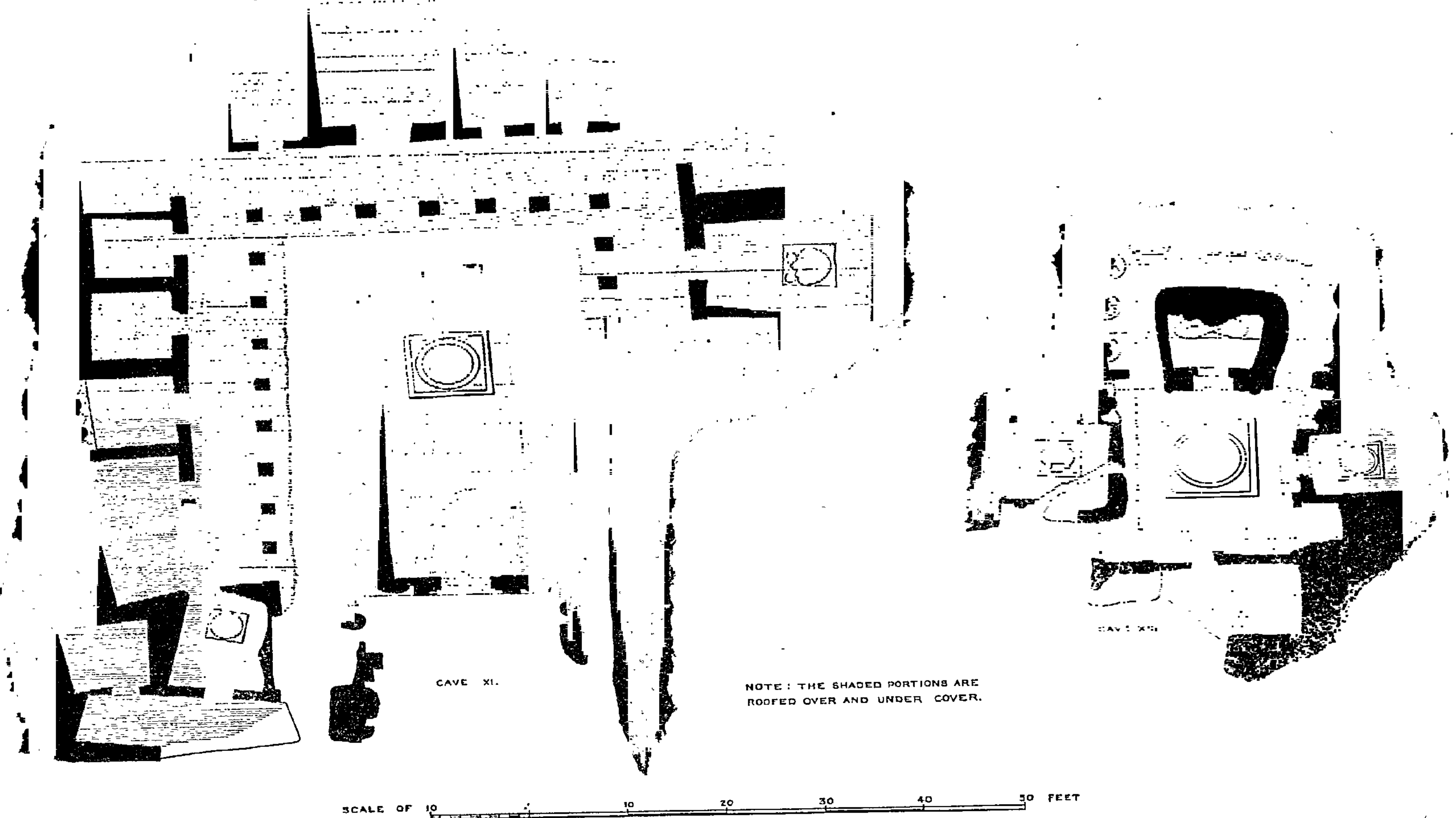
[1] Annals and Antiquities of Rājasthān, Bk. II, Chap. XII.

estimated the numbers at between sixty and seventy, the great majority of these being insignificant. He visited them and described them at length in his *Rock-cut Temples of India*. Subsequently the late General Sir Alexander Cunningham looked them up and gave his account of them in the second volume of his reports. In the names and numbering of the caves I have followed him. His plans, however, are faulty, and in my short visit of two days I was only able to measure up two groups (Plate XLI). In his general map of the hill the spur immediately below the north and south point ought to be deleted as it does not exist. The line of cliffs runs from the angle near the arrow head of the north and south point to the root of the middle spur as shown below, and the excavations shown in the end of the spur to be deleted are along the line of this cliff. The most southern spur, pointing south on the map, is twice as long as it should be, and the angle between it and the middle spur, where the principal caves Nos. I to XIV are, should more nearly approach a right angle. Upon the map, immediately above the north and south point, is a spur labelled "caves," and above this is another spur, running due north, which should also be deleted. In addition to the large group in this southern bay of the cliffs, there are some rough cells and free-standing *dāgobas* along the west face of the hill, as already mentioned. Beside these there are some Brahmanical images in a cave to the north of these, and the few cells in the end of the north-west spur, both labelled caves in the map. Perhaps the most interesting object on the hill is the monolithic temple of Dharmanātha, which stands in a pit in the plateau, just to the north of the main group of caves.

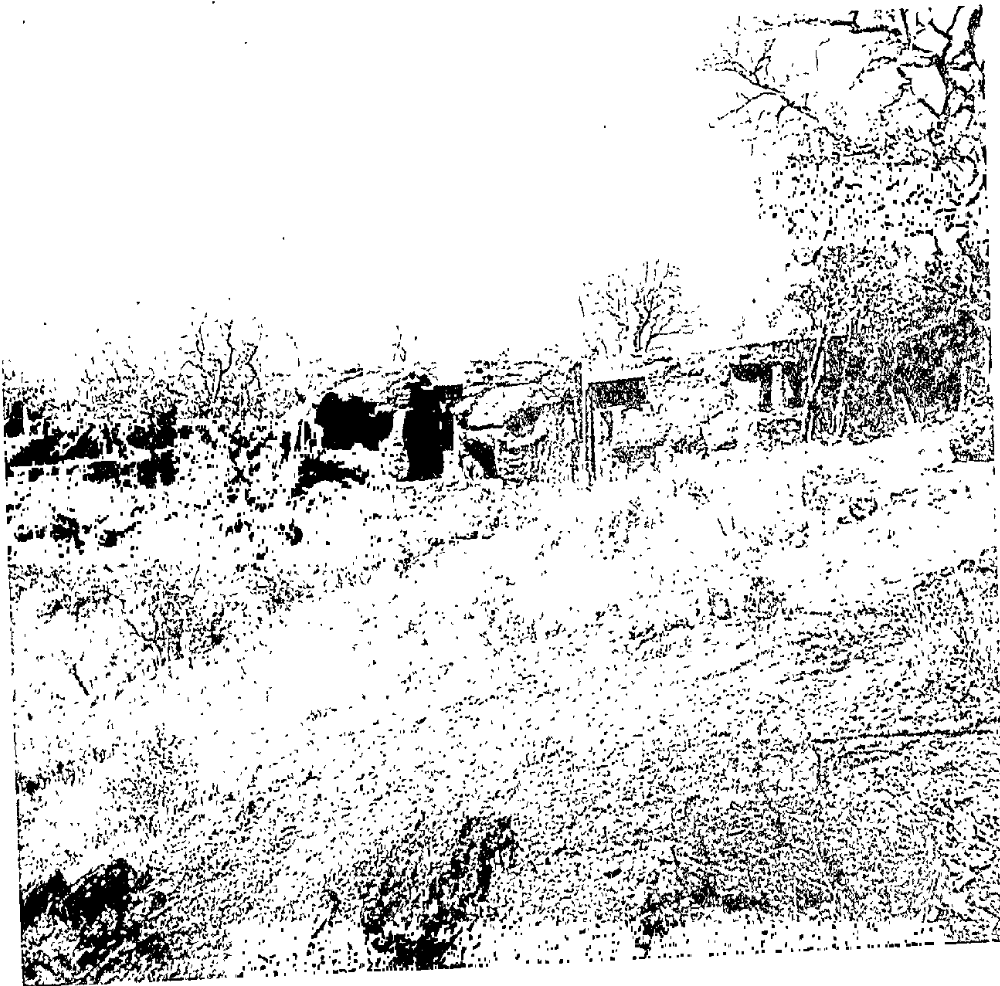
Colonel Tod was regaled with tales of the Pāṇḍavas, of Bhīma and the rest by the villagers, which, he says, his local conductor gravely swallowed; but, in rejecting these, he, himself, accepted similar myths doled out to him by this same man. He says: "Fortunately, I had my Jaina guru with me, who gave me more correct notions of these groups than the local *cicerone*." This man assured him that the main group of caves was of Jaina origin, and readily allotted names of Jaina pontiffs to each of the colossal images. He seems to have had no hesitation in assigning purposes to each of the caves; and his ready assurance and garrulity were only equalled by Colonel Tod's credulity. Fergusson and Cunningham knew better, and have ascribed to them their proper origin.

It is the group of excavations, marked XIII on Cunningham's plan, called the Small Bazaar or Child's Cave, which mainly discloses the Buddhist origin of the caves, and a short description of it might precede further remarks. The central object here (*see* plan on Plate XLI) is an open-air *dāgoba*, mounted upon a square basement, which occupies the middle of a small rectangular open courtyard. In front of this, on the north side, is a shrine in which a colossal Buddha is seated upon a throne, apparently in the teaching attitude. The images are more or less mutilated, and have lost some of their limbs, so that it is difficult, in all cases, to say what particular attitude they were in. This is the principal shrine of the group, and it is surrounded by a passage or *pradakshiṇā* path, carved out of the walls of which are nine great images of Buddha in relief. Upon either side of the doorway of this shrine stands a colossal Buddha, that on the west side being seen in the photograph on Plate XLIV*a*. It is in the benedictive or *āśīrvāda* attitude. Going round the *pradakshiṇā*

THE DHAMNAR CAVES.



a.



b.



a. GENERAL VIEW OF CAVES I-X.
b. TEMPLE, FROM BRIDGE OF ROCK ACROSS ENTRANCE TO PIT.

passage, with our right hand towards the shrine, we first find three standing images upon the west wall. In two of these the arms are broken off, but in the first sufficient remains to show that it was in the benedictive attitude. Upon the back wall are five images, three seated and two standing. The first, seated, is in the witness attitude; the first, standing, has both arms broken off at the elbow, but seems to have had both forearms elevated; the middle image, which is seated, is in the witness attitude; the second standing image is in the same state as the last; and the last figure on this wall, seated, has both hands in the lap in the meditative attitude. Upon the east wall of the passage is the well-known representation of the death of Buddha, or the attainment of *nirvāṇa*.

On the east side of the open courtyard, opposite the central *dāgoba*, is a shrine containing a *dāgoba* as the object of worship, while upon the wall, between this shrine and the *nirvāṇa* image, are the remains of a fat figure, seated, with the legs hanging down, which appears to wear a crown. Opposite this last shrine, on the other side of the courtyard, is a small shrine containing a *dāgoba* in its centre, with a small image of Buddha upon the front of it. But this small shrine did not open into the courtyard, access to it being gained from without. This side of the group is much damaged by the fall of the rock, and it is now impossible to say what kind of general entrance existed, which must have been at this corner. There are the remains of other seated images within this courtyard, but they are very much damaged.

Another interesting group is that known as Bhīm's Bāzār, or cave XI on Cunningham's plan. We find here the unusual combination of a *chaitya* and a *vihāra*, the latter surrounding the former upon the three sides of a long rectangular open court, in the centre of which, free-standing, is the *chaitya*. I use the terms *chaitya* and *vihāra* as now generally used to mean an arched-roof chapel cave and a flat-roofed residential monastery respectively. The plan of this group, as may be seen from the accompanying plate, is not quite the same as Cunningham's. His lines are too regular, and the number of cells upon the west side are four too many. The centre cell upon each side appears to have been a private chapel for the monks who lived in the adjacent cells. In that upon the west side are two seated Buddhas, upon the back wall, one of which is in the witness attitude; the other is too damaged to tell what attitude it was in, except that, like the first, it is seated. The central cell on the east side contains a *dāgoba* standing in the centre of the floor. The central one at the back is empty, but it is very much larger than the rest and has a vaulted roof. The image in this was probably a portable one, and one of value, occupying the most secluded shrine in the whole range of caves. It may have been the residence of the head monk, as Cunningham supposes, but I am inclined to think not, on account of its arched roof.

In Tod's time the outer entrance porch of the *chaitya* appears to have been then standing; it is now a heap of fallen rock blocking up the entrance, as it seems to have been in Cunningham's time, it being represented by him on his plan by a mass of hatched lines. Of this porch Tod says: "The main apartment is that called Bheem's armoury or treasury [the *chaitya*], the entrance to which is through a vestibule, about twenty feet square, supported by two columns, and having four lateral semi-circular niches, now empty, but probably intended for statues; this opens to the

armoury which is a vaulted apartment, about thirty feet by fifteen, having at the further end a *dhagape*, supporting the roof."

Around the doorway runs a simple square moulding, set back, by way of ornament, at the two top corners. The same may be seen in the photograph of cave XIII, Plate XLIV,*b*. This was a favourite device in doorway designs in those days, and is seen at Ajanta, Elephanta, and Elura, as well as in some early mediæval temples. It formed, in many cases, convenient little niches for Gangā and Yamunā in Brahmanical caves and temples.* It is frequently used at the present day in Europe upon doorways and windows.

One peculiarity about these Dhamnār caves is the number of *dāgobas* that are found here. They are placed in *chaityas* and *vihāras*, standing out in the floor, as principal objects of worship; out in the open air, as free-standing objects, and in relief upon the walls as decorative contents of niches. As a rule, they are very tall as compared with their diameter, and thus proclaim a late date for the caves. The shapes of *stūpas* or *dāgobas* give a fair indication of their age. The earliest form was hemispherical, or near it, set flat upon the ground. Then a low drum or cylindrical portion was added below to give height to the dome, and also, as at Sānchi, to form an elevated processional path around it. Later, the drum grew in height compared with its diameter, until the whole object became a tall cylinder with a small dome on the top. The dome itself, originally a hemisphere, became bulbous and flattened; and, in later ones, it was a common practice to combine an image of Buddha, or even a *devī*, with it, by placing the latter in a niche carved out of the front of the cylinder. Mouldings were added round the drum which, as time passed on, became more elaborate. Square pedestals were, in later times, placed beneath the cylinder.

The ribbing introduced into the vaults of the *chaityas* here shows a very late development. Instead of being free-standing out from the vault, as in the earlier caves, which, themselves, were faithful copies of the earlier wood-constructed *chaityas*, the ribs are formed here by scooping out channels round the vault, out of the vault roof itself, so that the narrow ridges between the channels form imitation ribs, and this is done very clumsily. This ribbing ends just before the *dāgoba* and is not carried radially round the apse as in the earlier caves.

The caves all appear to have had a coating of plaster, much of which still adheres to the walls, mud plaster within the caves and lime without. There is no clean surface left anywhere by which to judge whether the walls were painted or not. The more we examine these old caves and buildings the more does the presence of plaster impress itself upon the attention. It would appear that plaster was more used in those early times than has been supposed, and this was probably embellished with as gaudy colouring as is to be seen upon many modern shrines to-day. The weathering of years has denuded most caves and buildings of these additions, and we look upon the naked stone or brick walls, with their softer tints, with much more pleasure. I am beginning to believe that, in the case of the caves, those, whose walls were left in any degree rough, were plastered and perhaps painted. In the cells in which the monks lived and slept, now so dark and gloomy, it is reasonable to suppose

* *Cave Temples of India*, Plate LXI.

DHAMNAR CAVES.

a.



b.



a. FRONT OF CAVE VI.
b. N.-W. CORNER OF BACK CORRIDOR OF CAVE XI.

PLATE XLIV.

DHAMNAR CAVES.



a. A CORNER IN CAVE XIII.



b. DOORWAY OF CELL IN CAVE XIII.

that they were lightened and brightened by plaster and whitewash. In any of these, where the gloom at present prevents one from seeing into the corners, it is only necessary to hold up a white cloth in front of the doorway to realize the amount of illumination that is obtained by simple reflection from white surfaces. The spongy nature of the rock, here, would make it the more necessary to plaster these caves. In the *chaitya* cave No. VIII, there is a large halo of small holes upon the left hand wall, as you enter, which indicates that pegs were driven in to hold a great nimbus of plaster or wood surrounding the head of a seated image which was probably placed against the wall.

Immediately north of this group of caves, across the plateau, and in the side of the glen where a water course leading to the tank takes its rise, are a few little insignificant Brahmanical excavations with some unfinished sculptures.

The most interesting object at Dhamnār, however, is the rock-hewn Brahmanical temple of Dharmanātha which stands in the middle of a pit in the plateau a few yards north of the caves. Access is obtained to it through a deep narrow rock-hewn passage leading in from the hillside round to the east of the caves. Bridges of rock span this passage at different points, one crossing it as it debouches upon the court-yard or pit in which the temple stands. The photograph of the front of the temple on Plate XLII*b* was taken, looking down, from the top of this bridge. This monolithic temple is somewhat of the same general style as that of the famous Kailāsa at Elura, though on very much smaller and poorer lines. Unlike that temple, which is in the southern or Dravidian style, this is in the northern or Āryan. We have at Dhamnār the main temple consisting of porch, hall, and sanctum surmounted by its *śikhara*, and seven small shrines around it acting as its satellites. The pit, in which the temple stands, measures 170 feet long by 66 feet wide, and it is about 30 feet deep. The pit of Kailāsa at Elura measures 282 feet long by 160 feet wide, and 107 feet deep at the back.

Under the bridge, at the entrance to the pit, on either side, are recesses in the rock containing images, that on the south side being Bhairava, and that on the north Kālī, and not the Kālikā Avatāra as stated by Cunningham. Kālī has her foot upon a prostrate form.

The main temple faces the east and the entrance to the courtyard. It will be seen from the illustrations that the architecture partakes of the same heavy character as that of Kailāsa at Elura. Here it is balder on account of the spongy nature of the rock which forbade any attempt at fine work. But what was thus lacking in the rock was probably supplied in the superimposed plaster, which, judging by the fragments still left, was liberally applied to the surface. One peculiarity is noticeable in the decoration of the roof of the *maṇḍapa*, namely, the half *chaitya*-arch ornament, seen on either side of the little central *śikhara* over the porch. We find this upon other temples of the same age, notably an old temple of Sūrya at Sutrāpāḍā on the south coast of Kāthiāwār.

There is little doubt that the temple was originally dedicated to Vishṇu. Against the back wall of the shrine stands a statue of Vishṇu, holding in his hands the *gadā*, *mālā*, *chakra* and *śankha*. Upon the dedicatory block over the doorway to the shrine are seated Vishṇu and Lakshmī, which is shown by his holding in his upper right

hand the *gadā*, and in his upper left, seen between their faces, the *chakra*. The left lower is round Lakshmi's waist, and the right is uncertain. There are no *kīrtimukha* faces upon the threshold as are found usually upon the doorways of Śaiva shrines. Gangā, upon her *makara*, stands upon the south side of the shrine doorway below, while Yamunā, on her tortoise, stands on the north side. Over the entrance of the porch, seated in a small panel, are a couple of figures which probably represent Lakshmī-Nārāyaṇa, but the surface of the stone is too weatherworn to show what the symbols or vehicle were. There is no pavilion or place for the Nandi, which would have been provided, as at Kailāsa at Elura, had the temple been originally dedicated to Śiva.

The interior of the temple is comparatively plain, the pillars being simple and substantial. The ceilings have been decorated to some extent. There are two back doors leading out of the *maṇḍapa* at the south-west and north-west corners into the surrounding courtyard. These would be very unusual in a structural temple, but here they seem to follow, literally, the plan of Kailāsa where two similar doors open out into the elevated and isolated terrace surrounding the main shrine. On this terrace, at Elura, are five satellite shrines surrounding the main one, just as at Dhamnār five similar ones girdle the principal shrine; but, at Kailāsa, as already stated, they stand upon a lofty terrace, the only access to which is by these back doors, since there is no way of getting at them by the front or side doors of the hall. At Dhamnār, however, the front door opens directly into the same courtyard wherein the satellite shrines are, and so there is no reason for having these two back doors; they are superfluous, and are no more required than in mediæval *panchāyatana* or other temples, which have not got them.[1] The two corner shrines, at the back, at Dhamnār are square while the other three are oblong shrines exactly as we find them at Kailāsa. The side doors of the *maṇḍapa* or hall of the latter lead into blind porches; that is, there is no exit from them since they stand high above the courtyard below. Here at Dharmanātha a stone grille or grating, set in a projection in either side, where a porch might have been, carries out the same idea. If then, as I firmly believe, Kailāsa was the model upon which this temple was planned, Dharmanātha must be later than Kailāsa, which was probably excavated about the middle or last quarter of the eighth century.[2] If we put the excavation of Dharmanātha at A.D. 800, I do not think we can be far wrong.

And here a little digression may be permitted to bring out an interesting point. None other than the connection of this monolithic temple of Dhamnār with the old temple of Kailāsanātha at Conjeveram. The great rock-cut Kailāsa, at Elura, is an undoubted copy of the old structural temple of Virūpāksha at Pattadakal in the Bijāpur district,[3] and this again, a temple in the Dravidian style of Southern India, is strikingly like the old temple of Kailāsanātha at Conjeveram. Three inscriptions throw some light upon their connection, one with the other. One, connected with the temple of Lokeśvara or Virūpāksha, as it is now called, at Paṭṭadakal, tells us that it

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[1] Compare Cunningham's plan of the Dhamnār temple with the plan of Kāilasa as given on Plate LXXXIA in *Cave Temples of India*.

[2] *Cave Temples of India*, p. 450. See also Bombay Gazetteer, Vol. I, Part II, p. 195.

[3] *Cave Temples of India*, p. 450.

DHAMNAR CAVES.

a.



b.



a. GROUP OF STUPAS.
b. FRONT OF MONOLITHIC TEMPLE.

was built by Sūtradhāri Gunda for Lōka Mahādevī, the queen-consort of Vikramāditya II, of the Western Chālukyas, in commemoration of his having thrice conquered Kāñchī (Conjeveram)[1]. Another, a copper plate grant, informs us of the conquest of Kāñchī by Vikramāditya, and adds that he spared the city and overlaid the images with gold.[2] Couple these two inscriptions with the fact that at Kāñchī, in the temple of Kailāsanātha, we have the prototype of the temple of Virūpāksha at Paṭṭadakal, and the obvious inference is that Vikramāditya was so struck with this famous temple that he induced, or, more likely compelled, artificers and builders to come back to Paṭṭadakal with him to build one like it at his capital. This is partly confirmed by two Paṭṭadakal inscriptions on the eastern gateway of the temple[3], one of which speaks of the builder of Lokeśvara as the most eminent Sūtradhāri (architect) of the southern country. The other, above the adjacent old temple of Pāpanātha,[4] is in praise of a certain Chaṭṭara—Revaḍe— Ovajja, who is said to have "made the southern country," that is, as Mr. Fleet construes it, constructed the temples of the southern country. Its erection might be placed at about A. D. 735. In the time of Vikramāditya's son, but a few years after the completion of the temple, the Rāshṭrakūṭās, under Dantidurga, swept down upon the Chālukyas and dispossessed them of their territories, or at least the northern districts. He no doubt worshipped in the temple of Virūpāksha at Paṭṭadakal, and he, or his successor Kṛishṇa I, being impressed with the building, had it copied in the rock at Elura, where, about that time, cave cutting must have been in full swing. The Dhamnār temple cannot be much later, and was, perhaps, excavated by some local chief who had returned fresh from gazing upon the then new wonder of the world—the great Kailāsa at Elura.[5]

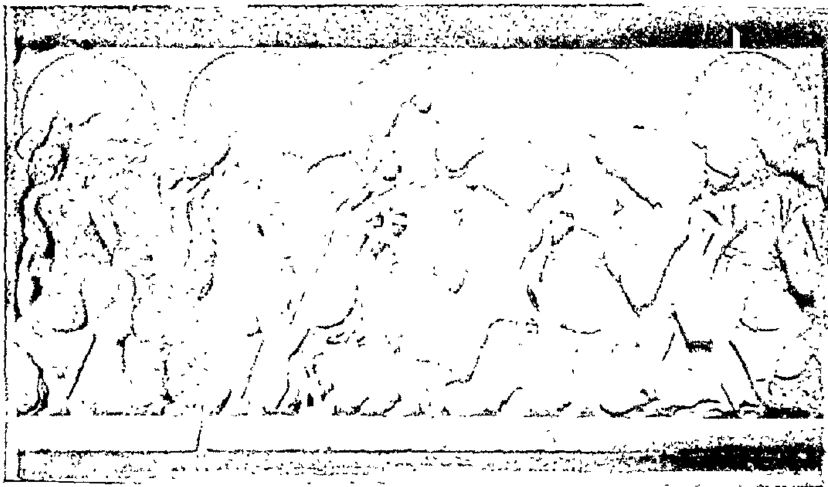


Fig. 1. Siva dancing the Tāṇḍava.

To return to the temple. It is surrounded, as already stated, by seven minor shrines, five around the main shrine and one each in the north-east and south-east

[1] Indian Antiquary, Vol. X, p.163.
[2] Indian Antiquary, Vol. X, p. 164.
[3] See Indian Antiquary, Vol. XII, p. 229.
[4] Indian Antiquary, Vol. VIII, p. 23.
[5] Indian Antiquary, Vol. X, p. 170.

corners of the courtyard. The latter is empty, while the next in order, going round the temple with the right hand to it, contains a slab bearing a representation of Śiva dancing the *tāṇḍava* with Nandi below him, in the centre, surrounded by four dancing goddesses. The latter are, from east to west, Pārvatī, with Nandi beneath her; Vaishṇavī, with Garuḍa below; Indrāṇī with her elephant, and Brāhmī with the goose. What Cunningham says are halos round their heads I think are garlands, such as depend from their shoulders down across their knees, thrown out into circles by the gyratory action of the dance. The heads, arms, and all projecting portions are smashed. The south-west corner shrine is empty. The middle shrine at the back of the main temple contains a slab bearing Nārāyaṇa reposing upon the serpent Śesha, with Brahmā springing from his navel, and who was attacked by the demons Madhu and Kaiṭabha, who in turn were destroyed by Visṇu. In the sculpture they are represented at Visṇu's feet as if attacking each other. Below them, at the end of the serpent couch, sits Lakshmī upon a low stool. The shrine in the north-west corner is empty, but in the middle shrine on the north side is a slab bearing ten *avatāras* of Visṇu. There are nine compartments, the first on the left containing two *avatāras*—the fish and tortoise. In the eighth compartment is a full length figure of Visṇu, a counterpart of that in the main shrine, which takes the place of one of the *avatāras*. The small shrine in the north-east corner of the courtyard is empty.

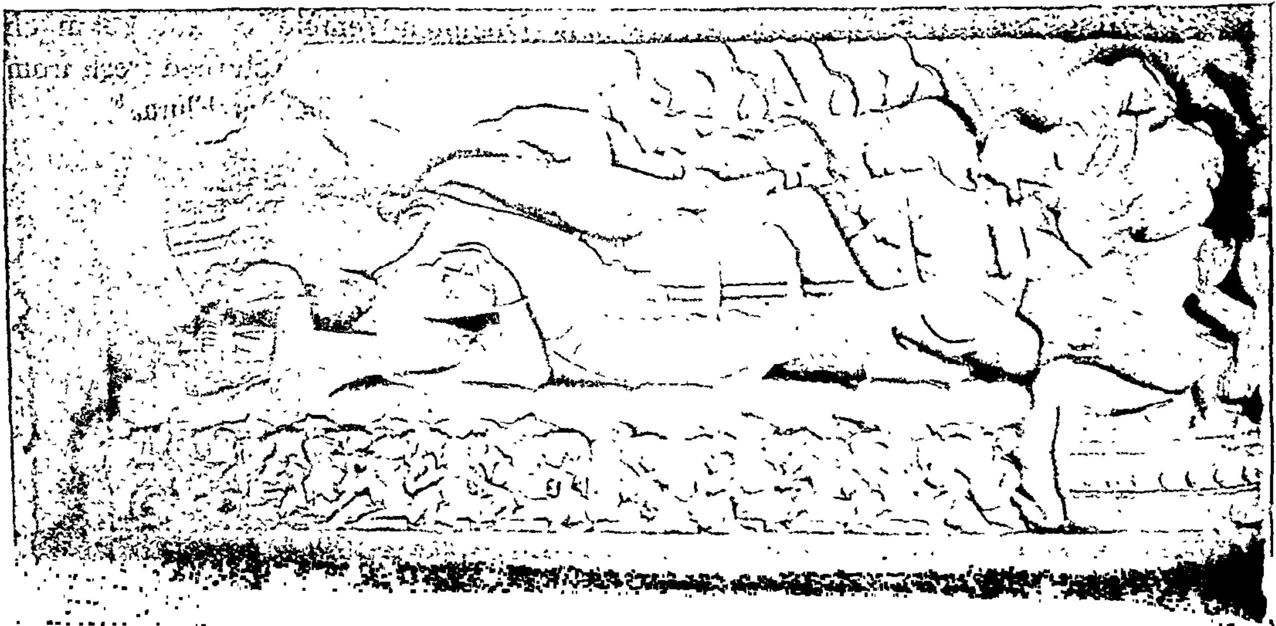


Fig. 2. Nārāyaṇa reposing upon Śesha.

The statues in these small shrines are executed in a light drab close texture stone, and are of the most finished style of workmanship, though now much mutilated. There is no doubt, I think, that they are the original tenants of these shrines, as the seats upon which they are placed, and which are cut from the rock, are made to fit the image slabs. As the principal subsidiary shrine, that immediately behind the main shrine, contains a Vaishṇava image, it helps to prove the Vaishṇava origin of the main temple. These images are not now worshipped, and probably have not been since they were mutilated, when worship in the temple ended for a period. It is

possible that the Muhammadans, in their first inroads into Central India, desecrated the whole temple, dispersed its Vaishṇava attendants, and left it desolate. This desecration may have occurred more than once; any how it would appear that after some time of desuetude it was taken possession of by Śaivite priests who set up the present *liṅga* therein. If this be so, then the name "Dhamnār," now applied to the caves, could not have been in use before that time, seeing that it is but a corruption of the Śaivite epithet Dharmanātha, the name of the *liṅga* set up in the temple.

As to the age of the Buddhist caves, I feel inclined to put them at a date earlier than the temple, for the long passage to the latter would have taken the much shorter way out to the face of the hill on the south had the caves not been there to prevent it. The later Buddhist and Brahmanical caves at Elura are too nearly of one age to lead one to think that the one colony died out, or deserted their caves, before the other began to cut theirs. There is no doubt that the two communities worked and worshipped side by side for some time. So I would think the excavators of the temple, here, found the Buddhists still in possession of their caves, else it is likely that the rock-cut passage to the temple would have been brought out to the south cliff even through the caves. The actual presence of the Buddhists probably caused the Hindus to respect their shrines. The middle of the eighth century, then, would I think be about the date of these Buddhist caves.

There is yet another object, or rather two, to be noticed upon the plateau of the hill. About a hundred and twenty feet from the north edge of the pit in which the temple stands, and standing in a line almost parallel with it, are two small stone pillars set up about a hundred and fifty feet apart. Upon the western one is inscribed, roughly, a short inscription in four lines which reads

सम्वत १७५३
नागोनद रा
मजीन रा
स कराया

Samvat 1753 Nāgonada Rāmajī na rās karāyā. "In *samvat* 1753 Nāgonand Rāmajī established a *rās*." *Rās* is a term usually applied to a particular dance originated by Krishṇa and the *gopīs* or shepherdesses. If some such Vaishṇava festival was established then we might suppose that at that date Vaishṇava worship was still being carried on in the monolithic temple, and that its occupation by the Śaivites was of considerably later date. But Cunningham reads the date as 1306, which is certainly wrong in two figures. The second figure is like the last figure in the date of the Ambarnātha inscription[1], only that the tail is drawn down a little more. Of course, in this case, it cannot be 9, since the date 1953 would be but a few years ago, long after Cunningham's visit. Again the third figure is most assuredly not O. It is made somewhat like the letter प and is no doubt intended for 5, the stroke on the top being only part of the one long line drawn for all the letters to hang upon.

HENRY COUSENS.

[1] See Progress Report of the Archæological Survey of Western India for the year ending 30th June 1901, paragraph 39.

EXCAVATIONS AT AMARĀVATI.

AMARĀVATI stands on the right bank of the Kṛishna river about 20 miles north-north-west of Guntur.

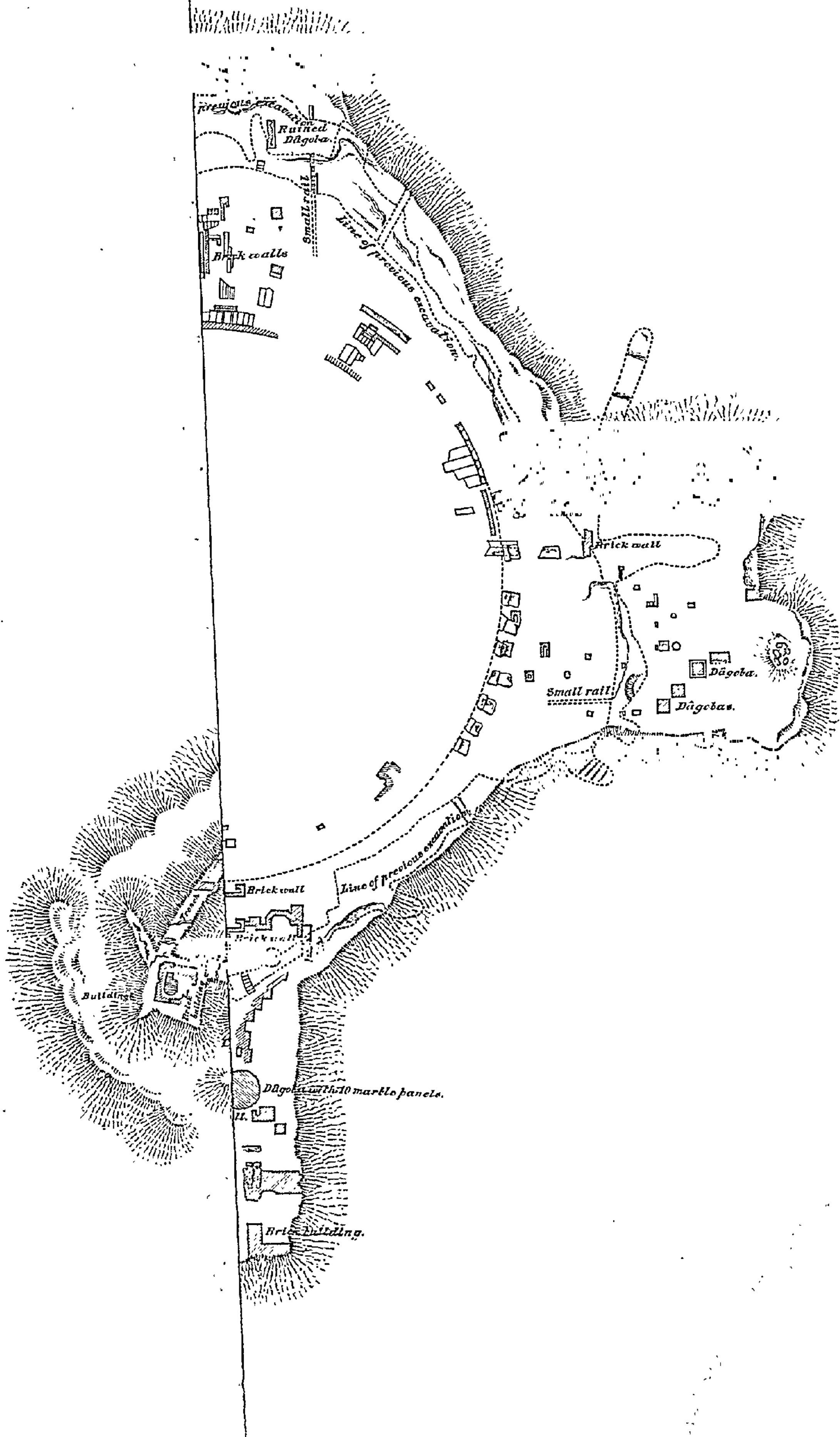
On the south outskirts of the village is an extensive mound, on the northern slopes of which some of the houses stand. This is the site of the Amarāvati *stūpa*, one of the most important and historically well-known Buddhist monuments of the south. But of the central building almost nothing whatever remains: it is a site, and a site only. About the centre of the mound is a huge cylindrical excavation of about 260 feet in diameter, irregular in outline, but generally circular, with extensions at the four cardinal points, where the excavations have been pushed outwards. The sides of this excavation vary in height from ten to twenty feet or more.

The history of the *stūpa* and its vicissitudes are a well-known story, which there is no need to recapitulate here. It has been fully gone into and described by Dr. Burgess, in his volume on the subject.[1]

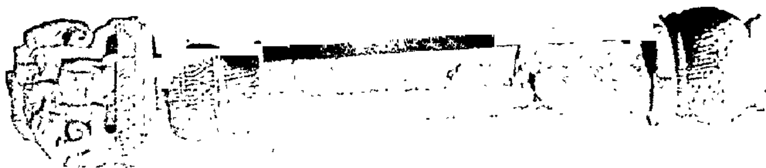
During the seasons 1888 and 1889, I conducted some excavations at the site, and discovered a large number of sculptures. These were almost all loose slabs which had fallen from the building before it went completely to ruin, and lay buried in the ground around the central site. This work was therefore chiefly in digging into the bank which surrounds the central circular excavation. Detailed reports on the work then done were submitted to the Government of Madras, and afterwards published in Government Orders.[2] Since that time and up to the present, no further digging has been done.

The centre of the site, where the great *stūpa* once stood, is destitute of the slightest traces of masonry. Around it, in places, some of the pavement slabs of the procession path yet remain in position, with the low brick parapet outside them, against which stood the great marble rail. It is in the space outside the pavement, that all excavation has hitherto been made. No traces of buildings have been found opposite the quadrants of the circle, though large numbers of sculptures have been dug up; but at the positions of the four gates at the four cardinal points, where digging has been carried further into the banks, fragmentary traces of brick walls have been found.

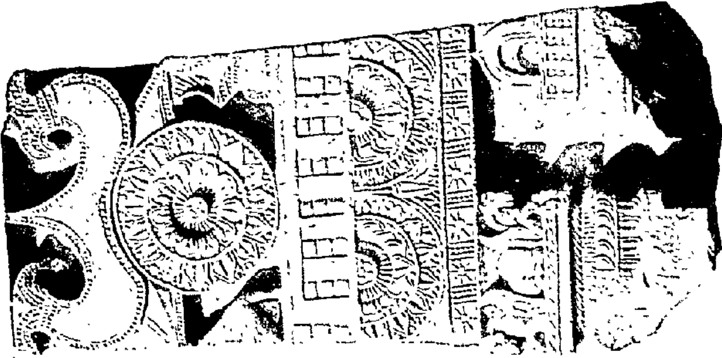
[1] *The Amarāvati and Jaggyapeta stūpas*, 1887.
[2] G. O. No. 896-Public. dated 11th September 1888. G. O. No. 383-Public, dated 30th April, 1889.


Previous excavation
Ruined Dâgoba.
Small rail
Brick walls
Line of previous excavation.
Brick wall
Dâgoba.
Small rail
Dâgobas.
Line of previous excavation
Brick wall
Building
Dâgoba with 10 marble panels.
Brick Building.

EXCAVATIONS AT AMARAVATI.


1


2


3


4


5


6


7

In some digging which I recently conducted, right around the quadrants of the circle between the gates, the original ground level was found to vary from three to five feet below the pavement. Marble statues, sculptured panels, piers, inscriptions, plain and ornamented rail panels, and a large number of fragmentary sculptures were dug out at these depths, and at distances extending up to fifteen feet outside the position of the great rail. None of these were *in situ*, and they are evidently mostly portions which had fallen to the ground while the central building was yet intact, and before it had become silted up with soil.

The figures in the following Plates represent a few of the more typical examples of sculptures and other articles unearthed.

PLATE XLVII.

Fig. 1. A column in three pieces, 6′ 6″ high, surmounted by elephants with howdahs and riders. It has had a terminal ornament or statue on the summit. From the south-west circuit.

Fig. 2. A pilaster, 2′ 5″ high. It has stood between sculptured panels, probably in the spaces between those of the newly discovered *dāgoba* (Plate L, figs. *a* and *b*, and Plate LI, fig. 2). From the east side of the south gate.

Fig. 3. A portion of a slab, 4′ long, with part of the capitals of a pilaster supporting a rail surmounted by a disc and *triśūla*. From the west of the south gate.

Fig. 4. A panel 4′ 10″ long, with *dāgoba* and worshippers in the lower compartment, and rows of lion and *triśūlas* above. From the north of the south gate.

Fig. 5. A base slab, 3′ 8″ long, with three *dāgobas*, and four worshipping images. From the east side of the south gate.

Fig. 6. A seated slab image 1′ 3½″ high. The carving is stiff, and is evidently a late example. From the south-west circuit.

Fig. 7. A slab statue of Buddha, 1′ 6″ high. From the south side of the west gate.

PLATE XLVIII.

Fig. 1. A coping stone to one of the small rails which have existed on the sides of the gates, 4′ 2½″ long. Along the lower part is an inscription. From the east side of the south gate.

At the gates, some statues, *dāgobas*, and brick walls were found in position. Except one square brick building at the south gate, which is still several feet in height, all the walls are very dilapidated, and have not more than one or two courses of bricks remaining. It is, therefore, at present, difficult to determine exactly what they may have been; but they were probably small *dāgobas* or the pedestals for statues or columns. Such a column was indeed found at the east gate. It is fluted, the flutes being turned in over the summit. It could not, therefore, have been intended for the support of any object. The lower part of it was found close by, in the former excavations. Some walls on the south side of the west gate indicate a detached building, but they have been much destroyed, and what remains has yet to be further traced. Near them were found a number of plaster ornaments—of which an example is given in Plate XLVIII, fig. 2.

Fig. 3. A panel, 1′ 4″ long; from the north side of the east gate.

Fig. 4. An elephant goad, 1′ 5¼″.

Fig. 5. A *yali* or lion in stucco.

Figs. 6 and 7. Some heads of statues in stucco. Similar ones were found at this spot during the previous excavations.

Fig. 8. A small bronze lamp. It has branches of hooded snakes supporting small oil cups. Two other bronzes were found at the south gate.

Fig. 9. The perforated lid of a vessel, 2¾″ diameter.

Fig. 10. A small object like a miniature *dāgoba*.

Fig. 11. A grass cutting implement, 5½″ long.

Fig. 12. A cup, 2⅜″ in diameter.

Fig. 13. A grass cutting implement, 7″ long.

Plate XLIX.

Fig. 1. Convex circular lid, 8⅛″. From the north gate.

Fig. 2. Small bowl, 6″. From the north gate.

Figs. 3 and 4. Chatties, 4¾″ and 5″. From the north gate.

Figs. 5 and 6. Terminal knobs, 2¾″ and 3¼″. From the north gate.

Fig. 7. A flat bowl, 8″. From the north gate.

Figs. 8 and 9. Two small *lotas*, 2¾″ and 2⅝″. From the east gate.

Figs. 10 and 11. Two small cups, 3¼″ and 2¾″. From the east gate.

Fig. 12. A small Buddhist seal in lapis lazuli. It has the figure of a lion and a Pali inscription and was found in the fields at Amarāvati. Mr. Venkyya translates it as *Bhūtisa(ma)* meaning "the extreme limit of riches" or the name adopted by some king who thus called himself "the wealthiest man."

Fig. 13. A cylindrical jar with bulbous bottom, 6¼″ high. From the west gate.

Fig. 14. A water jar with long narrow neck, 9¼″. From the east gate.

Fig. 15. A circular white marble sandal stone dug up in the village. It has three legs and a lotus carved patera on the underside. Diameter 2′ 2″. It is presumably Buddhist.

Plate L.

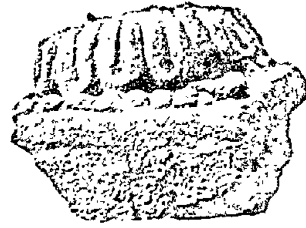
Dr. Burgess quotes[1] Fergusson as saying that the great *stūpa* was surrounded by numerous small *chaityas*, miniature copies of itself. Whether such stood, or yet stand, outside the quadrants of the rail, is not yet known, certainly none have yet been found: but an extension of the digging would doubtless solve the point. However this may be, the latest excavation has shown that, besides statues and columns or *stambhas*, such structures did stand at the gates, outside and to one side of the roadway leading to them, for a very perfect example,—that is, perfect as to the lowest part of the structure, for the dome is away,—has been found beyond the east side of the south gate. At 50 feet outside the pavement, two gate piers have been unearthed, standing in position. The tops are broken away, but the discs on the lower part show them to have been similar to the posts of the great rail.[2] At a distance of 9 feet outside these, stands the *dāgoba* above referred to. (Figs. *a* and *b*.)

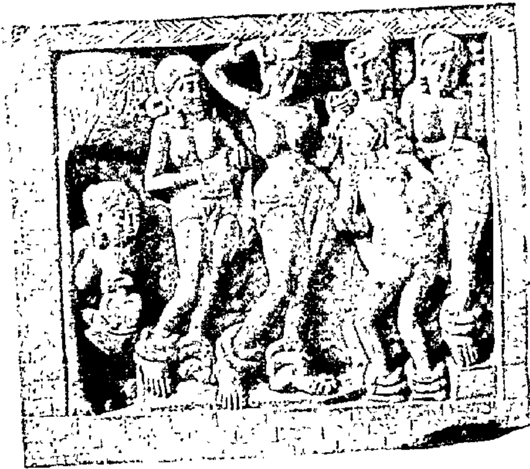
[1] *Amar. and Jagg. stūpas, p. 21.*

[2] Ref. *Amar. and Jagg. stūpas, Pl. V.*

EXCAVATIONS AT AMARAVATI.


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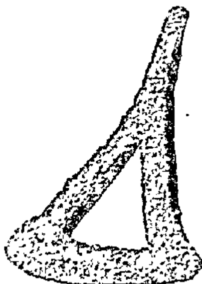

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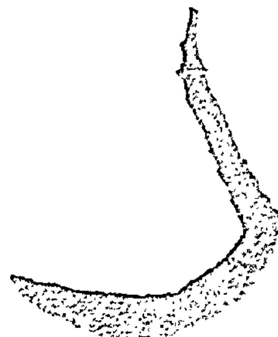

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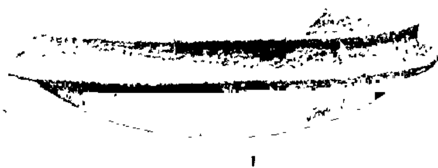

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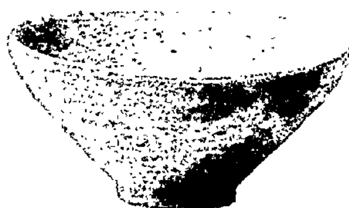

11


12


13

EXCAVATIONS AT AMARAVATI.


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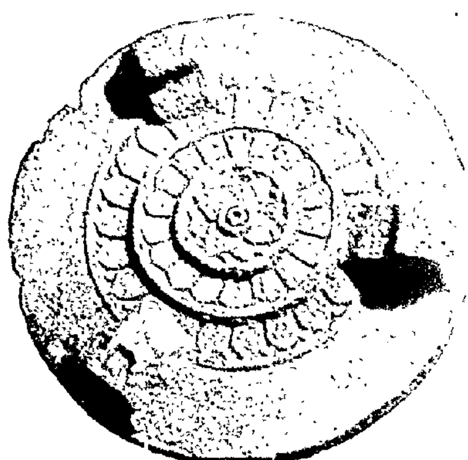

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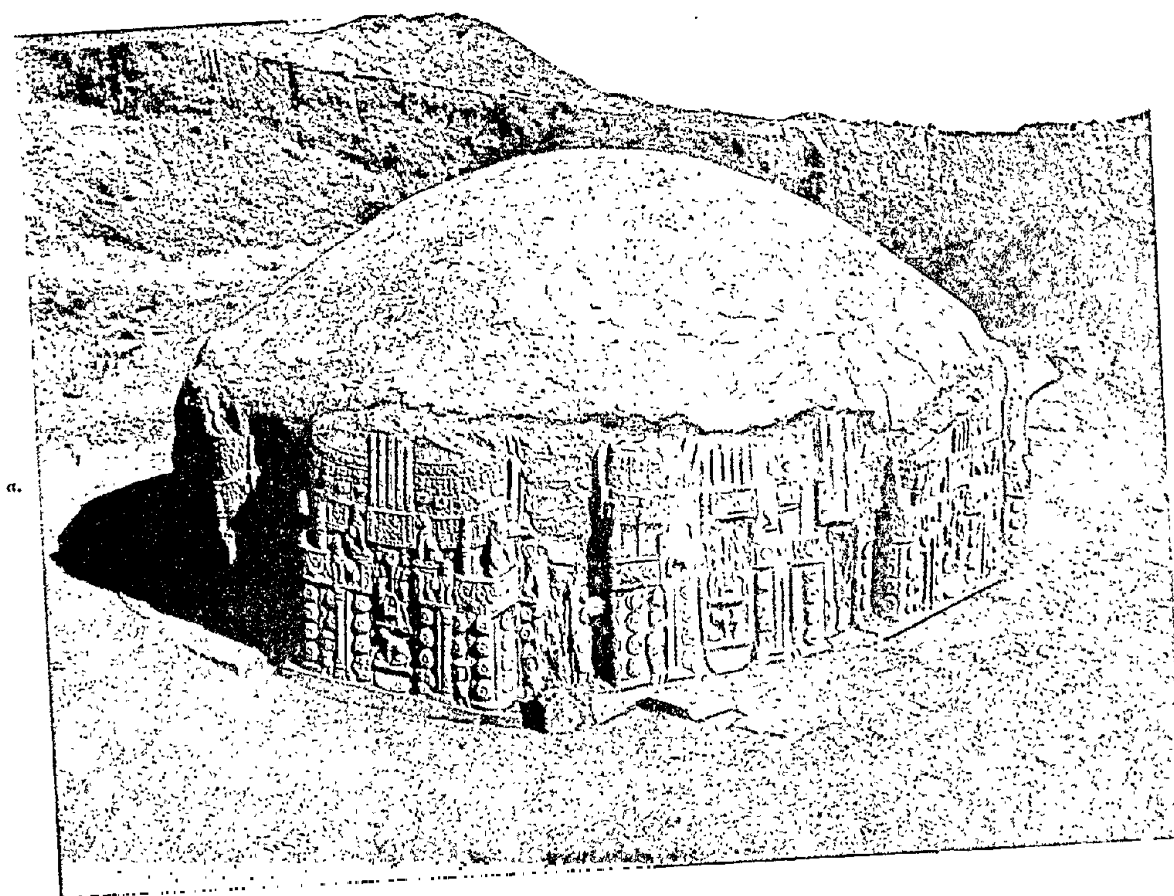

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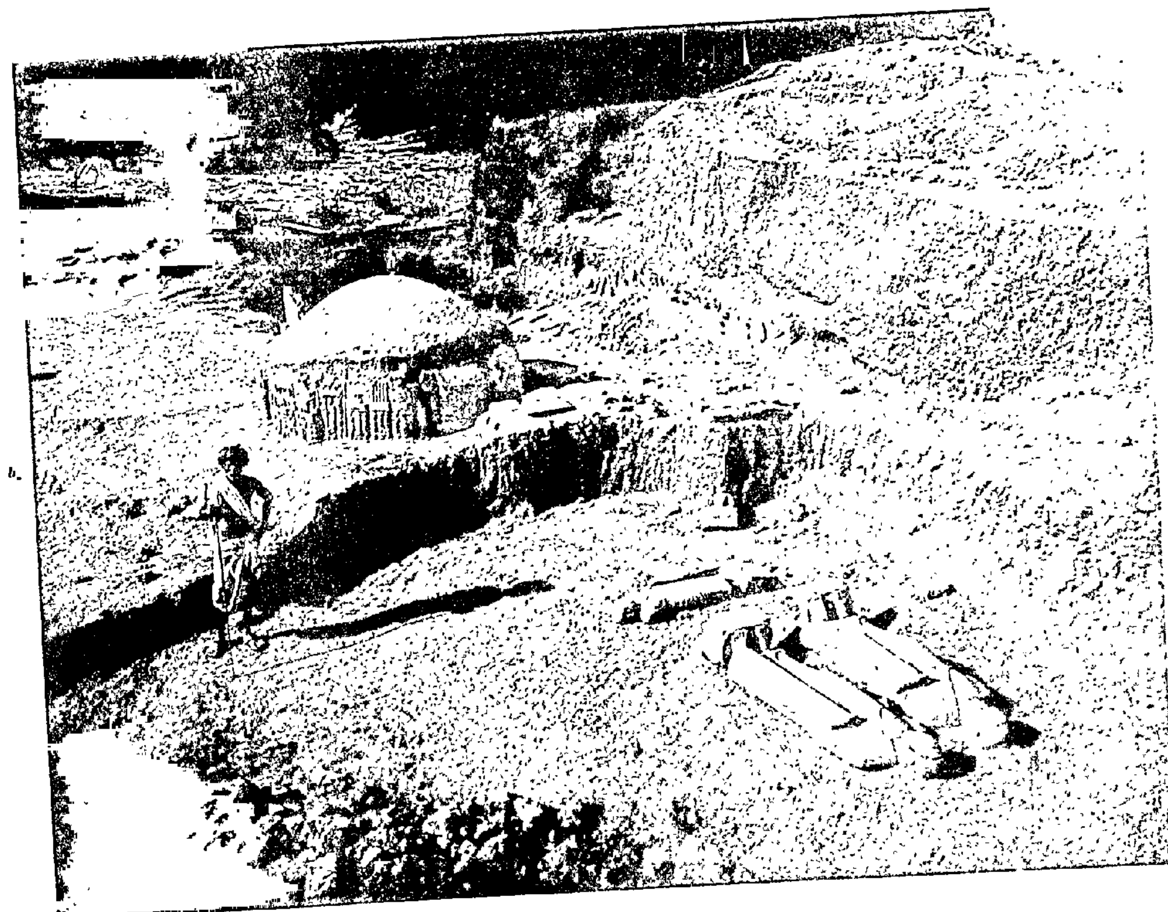

15

EXCAVATIONS AT AMARAVATI.

a.



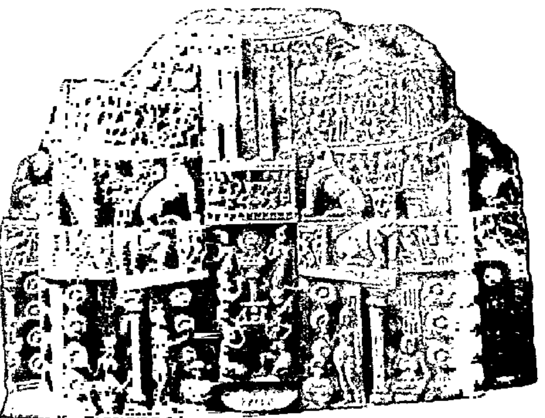
b.



EXCAVATIONS AT AMARAVATI.

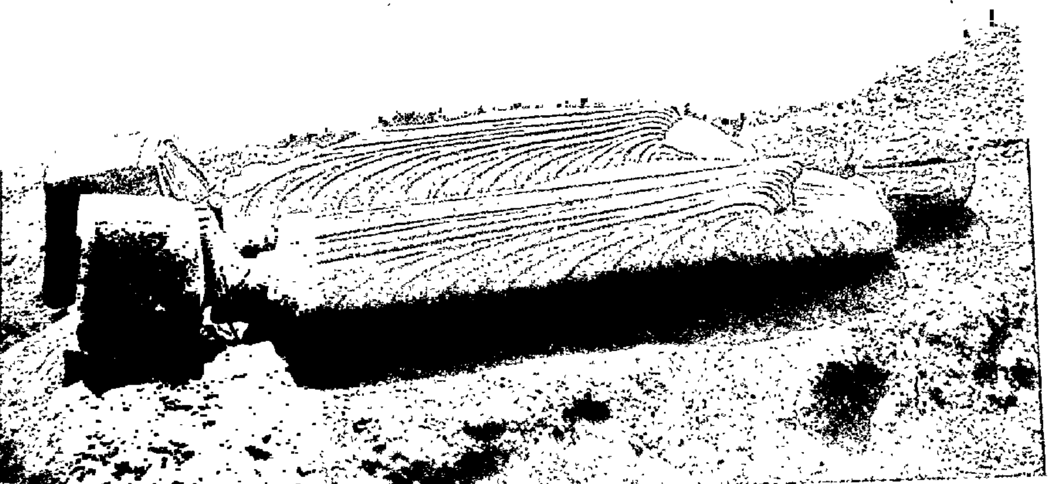


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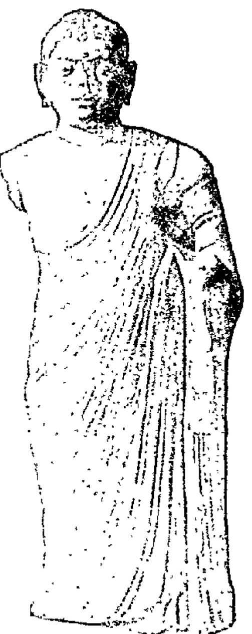


2





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4

It is 11 feet in diameter, and is encircled by ten finely sculptured *stūpa* slabs. Though all represent a similar subject, that is, a *stūpa* with its worshippers, all of them differ in detail. The domes are mostly broken off, because the surface line of the ancient mound passes over them. The earth which covers them at present, though extending to about 15 feet in height, is almost entirely that thrown out from the excavation of the centre of the mound.

PLATE LI.

Some remains of small marble rails with lenticular panels and plain posts, have been observed at the gates, particularly the east and north. Parts yet remain in position, but in a fragmentary condition. Outside those at the east gate, and to the south of the position of the roadway, was a group of six statues, all considerably mutilated. (Fig. 1.)

Fig. 2 is one of the *stūpa* slabs from the *dāgoba*. A portion of its dome still remains. It may be compared with a more perfect example illustrated by Dr. Burgess.[1] A narrow space between each panel has been filled by a pilaster similar to Plate XLVII, fig. 2, which has probably been one of them.

Thirteen feet outside the *dāgoba*, and at a lower level, some statues, including three of Buddha, were found lying prone.

Fig. 3. Two draped statues of Buddha lying side by side. They are 6′ 4″ high, and in almost perfect preservation. Another is shown in Fig. 4. It is complete, except the right arm and feet, and is 4′ 2″ high.

Some light has been thrown on a point, about which there has hitherto been some doubt. On each side of the east and west gates are a number of large granite slabs, in reality broad piers, pierced on each side for lenticular rails. These, it is thought, may have been used as buttresses, or are perhaps the remnants of an earlier *stūpa* never completed.[2] Dr. Burgess seems to incline to the latter view.[3] Lying as they were, in different directions, either wholly or partially buried in the ground, no definite idea of their use or actual position could be obtained. I therefore had the whole of them completely exposed, and found that they all lay with their bases roughly concentric with the circuit of the pavement; and though some had fallen outwards and others inwards, in the direction of the *stūpa*, it was perfectly evident that they had originally stood against the outside of the great marble rail, forming another rail at a lower level, being, in fact, buttresses to support the foundations at these points. This would have been necessary, as there, the ancient outside ground surface is much lower than the pavement of the procession path.

A number of the marbles unearthed during the excavations have inscriptions. Most of them are fragmentary.[4]

A large number of prehistoric stone implements, both paleolithic and neolithic, were found in the fields for several miles around Amarāvati. These indicate the existence of a large community in times probably long antecedent to the date of the *stūpa*.

A. REA.

[1] *Amar. and Jagg. stūpas, Pl. I.*
[2] One, it may be mentioned, at the east gate, has a line of a Pāli inscription.
[3] *Amar. and Jagg. stūpas, p. 23.*
[4] These will be described in a subsequent article.

BURIED JAIN REMAINS AT DĀNAVULA-PĀD.

ON the left bank of the river Pennār, about five miles below the taluk town of Jammalamaḍugu, is the small village of Dānavulapāḍ. The name means the village of Dānavas or Rākṣasas, designations by which the Buddhists and Jainas were known to the Hindus. The village stands on a high extensive mound, composed of the débris of ages.[1] Opposite the village, the river runs from west to east, between steep sandy banks, which are almost at times hidden under the floods that traverse its bed during the rainy season. From the north bank of the river, the ground slopes up to the village mound, which is situated about seventy yards distant. This intervening ground is composed of drift sand from the river, with, in places, a sub-stratum of black soil and broken pottery, such as is usually found in ancient sites. In this place, some buried Jain remains have been recently discovered, and partly excavated. The ground, bleak and sandy though it is, and apparently incapable of cultivation, has yet been let out to some of the villagers on *putta*[2]; and, in seasons of sufficient rainfall, has been made to produce some scanty crops.

The owners of one of these fields, knowing that bricks were buried in it, proceeded to dig them out. Close to the surface, they found the walls of a small square brick building, in the centre of which, the Nāga-shrouded head of a Jain *Tīrthaṁkara* appeared above ground. The discovery came to the notice of the local officials, and the intended demolition was stopped. But for the fortunate discovery of this Jain image, the walls would undoubtedly have been destroyed *in toto*, as so many ancient remains have been, particularly those of the Buddhists in the Kistna District. As it was, the local officials had the sand carefully excavated from the interior of the buried building, where a brick chamber or shrine, 11′ square with walls 2′ 9″ thick, was brought to light. The bricks are of large size, measuring 1′9″×9″×4″, and are such as are only used in buildings of very ancient date. In this respect, they resemble those used in the ruined Buddhist *stūpas* in the Kistna District. Inside the shrine, was a huge

[1] The site bears every evidence of being a very ancient one; and this is confirmed by an inscription of the thirteenth century, in a temple in the neighbouring village of Devagudi, which refers to a Jain temple at this place. A further confirmation was the finding of two Andhra lead coins at the site. A gold coin was also found there, and another similar, which had been got in the same way, was purchased in the village.

[2] *Putta* literally means a royal order or grant. It has now come to signify lands given for cultivation to private individuals by Government.

monolithic standing Jain image, the head of which had previously been seen.[1] The image, so curiously brought to light, was evidently regarded locally with some veneration, and the villagers would very soon have succeeded in converting it into a Hindu deity, if they had been given the opportunity.

In front, was a small antechamber with a sculptured pedestal outside it. A sloping ramp or pathway was then dug up to the surface from the front of the antechamber and further digging was stopped. This was its condition when first inspected by the Archæological Department; and except another image (fig. 6) there was nothing else visible on the surface.

As the circumstances gave hopes of further discoveries, which have since been realized, I marked out the position which I thought other buried remains might occupy, and a field nearly an acre in extent was acquired by Government. The excavations which followed, have disclosed the existence of an extensive paved courtyard, with various remains throughout the whole of its area, and even extending beyond it. Of these remains, the brick shrine, above referred to, faces the east, and stands near the north boundary of the ground, being thus close to the village mound. This boundary is marked by a rough retaining stone wall, which runs east and west. It was entirely underground; but, before the temple became buried in sand, it served to bank up the earth of the mound, and prevent it from falling into the temple court-yard, which is at a much lower level. The Jain statue in the shrine is 9′ 7½″ in height, from the knees upward. The legs below are covered by a stone pedestal, evidently thus placed to ensure stability.

The pedestal is placed unevenly, and as a precautionary after-thought. It will be seen that a similar image (fig. 6) is broken off at the knees. The statue is cut in a white limestone, having all the appearance of white marble; and I may here mention that all the other sculptures, below described, are of the same stone.[2]


Fig. 1.

Outside the front of the antechamber is a beautifully sculptured whitestone pedestal, standing *in situ* on a circular sculptured base. It is 2′ 6″ high. On the four sides of it, are seated *Tīrthaṁkaras*, with a *Yaksha* standing on a lion on each side. The chief *Tīrthaṁkara*, which faces the shrine, has a five-hooded *nāga* over the *prabha*. The pedestal stands on a square platform and is surmounted by a lotus and scroll ornament. Underneath, is a circular base or *panivattam*, sculptured with elephants and crocodiles as *vāhanams*. On the upper edge, is an inscription, as follows:—" Hail! The prosperous Nityavarṣa,—the ocean wherein Sri (Lakshmi) *viz.*, of spotless royal fame had her birth . . . . . . who always (possessed) great energy,—caused to be made (this) stone pedestal for the glorious bathing ceremony of (the Arhat) Śānti, in order that his (own) desires might be fulfilled. It is said that poison (itself) is not

[1] See my *Progress Report* for 1903-04, Plate VIII.
[2] The stone must have been brought from a considerable distance, for there is none in the locality.

(the worst poison); but that the property of a god is the (most) dreadful poison. (For) poison (if taken) kills (only) one person, (while) the property of a god (if confiscated, kills the confiscator), together with his sons and grandsons."[1]

To the south of the brick shrine, and at a distance of 15' from it, are the moulded black stone basement walls of another temple, the floor of which is at a slightly higher level than the courtyard. It stands parallel to, but further towards the west than, the brick shrine, and consists of a shrine, antechamber and *mahāmaṇḍapam*. The walls of the superstructure have gone; and whether they were built of stone or brick, or ever really existed, it is impossible to say. The probability however is, that the design of the superstructure like the plan, was similar to that of Jain temples existing elsewhere, particularly of those at Vijayanagar; and it is seemingly of about the same date. Some stones in a wall on the river bank may have been removed from here. The brick shrine is apparently earlier by a few centuries, for bricks of the size used in its construction are never seen in buildings of a later date. Moreover, brick buildings in this part of the country are a rarity.

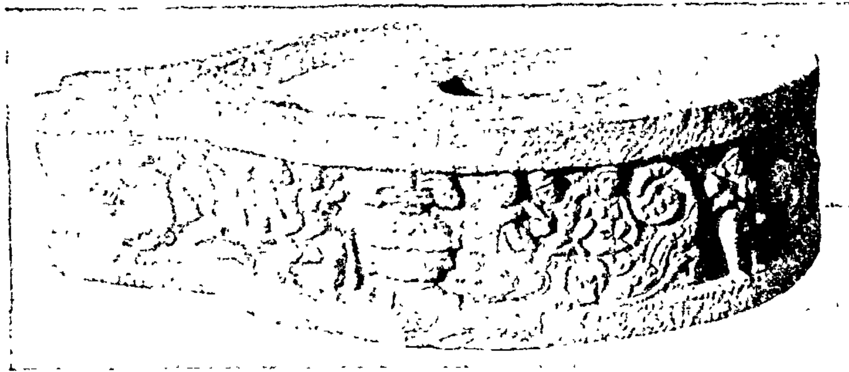


Fig. 2.

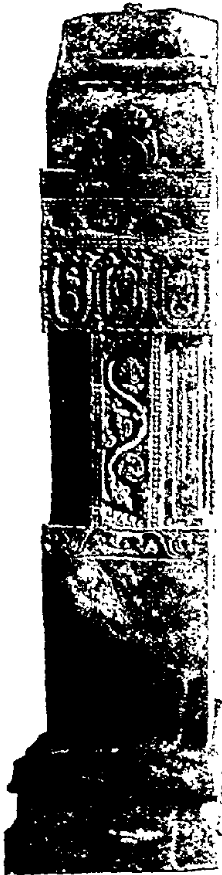


Fig. 3.

The *mahāmaṇḍapam* has traces of four piers having stood on the corners of a square stone plinth in the centre, with corresponding pilasters on the side walls. In the shrine, is a pedestal $2\frac{1}{4}'$ in length, with two lion panels in front. This

[1] All the translations are by Mr. V. Venkayya, Government Epigraphist in Madras.

stone is *in situ.* Various plain and moulded stones were found in different parts of the *mahāmaṇḍapam*, but evidently not in their original positions. Among these, were three bracket capitals. On a stone, at the front of the *mahāmaṇḍapam* is a short inscription with the words :—" The glorious (U) badēva-Maharāju . . . . . . " (The inscription is apparently incomplete). At the sides of the east door of the *mahāmaṇḍapam* are a few steps leading up from the courtyard ; and in front of them is a square platform, similar to that in front of the brick shrine. It may possibly have been an open porch, in which case, another rectangular platform further to the east, would be that on which stood a carved pedestal. Such a piece of sculpture was found lying close to the east side of this platform. It is 18″ in height (fig. 1), and similar in design, to the one previously described but not quite so well preserved. It has four-seated *Tīrthaṁkaras*, with standing *Yakshas* or *vāhanas* at each side. A sculptured base or *paṇivaṭṭam*, probably that on which this pedestal stood, was found lying by the door of the *mahāmaṇḍapam*. (Fig. 2.) It is round in plan, with a diameter of 2′ 11″, and has an elongated water channel on one side. Around its side are various sculptured images. These in succession are—a male figure lying grasping a garland with both hands; Kubēra and his wife riding a horse ; Varuṇa figures seated on a crocodile (*makara*) ; a female playing a *vīṇa ;* Iśānya figures on a bull ; a *bhūta ;* Yama—with a *śūlam*, seated on a buffalo (*mahiṣa*) ; and some other male and female dancing figures. A sculptured and inscribed panel (fig. 3) lay close by the pedestal above described. It is 3½′ in height. It has two sunk panels, in the lower of which are two seated male and female figures engaged in worship. Between them is a vase (*giṇḍi*). In the upper panel is a seated *Tīrthaṁkara* and nāgahood and triple tiara. Between the two panels is a *svastika*. Under the lower panel are two inscriptions, divided by an upright central line. The first part reads :— " Kanakakīrtidēva, the preceptor of Ādisetṭi . . . . " ; the second :— "The tomb (niśidhi), of Ādi (seṭṭi), son of Ballava-Siṁgiseṭṭi of Penugoṇḍe".[1]


Fig. 4.

Behind the second temple, an earthenware pot was found about 3′ from the surface. Though undoubtedly old, it must be much more recent than the temple, for it lay in the drift sand covering the courtyard.

On the south of the second temple last described, and standing parallel to it, are the foundations of a third temple. It is similar in dimensions and general outline of plan to the other; but, the ground being low at this point, there is less of its walls remaining. The rough foundations of a right angular wall run in front. Near the shrine walls lay a square

[1] Penukoṇḍa in the Anantapur District is mentioned in several of the inscriptions, and is known as one of the Vidyāsthanas or seats of learning of the Maisūr Digambaras. Burgess. *Digambara Jaina Iconography* ; *Ind. Antiq.*, Vol. XXXII, 1903, p. 459 ff.

pilaster $5\frac{3}{4}'$ in length (fig. 4). It has floral ornaments and bevelled angles in the centre of the length, and a moulded neck. The capital is missing.

Near the *mahāmaṇḍapam*, was a headless seated Jain image, 2′ 8″ high. Beside it, was the lower part of a *Yakshi* and pedestal. Some distance to the west were a *pāṇivaṭṭam*, with a headless seated female image, and a standing *Tīrthaṁkara* (figs. 5 and 6). The legs of the latter are broken off at the knees. It is similar to the statue in the brick shrine, but is of smaller size, being only 5′ 3″ high. It was probably the chief image of the second or third shrines.

At a distance of 42′ east from the brick shrine is a small square platform, on which was a sculptured double panelled slab. It measures 2′ 7″ high, and is similar to fig. 4. In the lower panel, are two seated worshippers, while a seated *Tīrthaṁkara* occupies the upper arched panel. In the central band, is a lion. Below, is an inscription which reads :— " The tomb (niśidhi) of Honnisetti, son of Śōyisetti of Penugoṇḍe (and) that of his queen (*i. e.*, wife) vīrāyi ". A few feet to the north-west of the platform just noted, stands a row of five sculptured and inscribed stones. The stone on the left is 4′ 6″ in height and has two panels in front, with a worshipper in the lower, and a seated *Tīrthaṁkara* in the upper panel. It is surmounted by a *kalaśa*. On the back is an inscription with the words :—" The tomb (niśidhi) of the teacher, who belonged to Kurumari-Nā-tīrtha. Haṁpave of Parokhyavimaya (Parōkshavimaya sect or school ?) set up (the niśidhi) ."

The second stone has two panels. In the lower, is a kneeling worshipper, while in the upper is a *Tīrthaṁkara* seated on a throne, with a *cauri* bearer on each side. The third stone has similarly sculptured panels, with, however, two worshippers in the lower one, and three lions on the front of the throne. On the back of the stone is an inscription which is too much damaged for translation. The fourth stone has the usual two panels with a seated *Tīrthaṁkara* above, and a worshipper below. On each side of the former is a *cauri*, while his sign, a crescent, is depicted below. On the lower part is an inscription :—"The tomb (niśidhi) of Maṁgave, daughter of Vijayaṇṇa, a *Vaiśya* of Penuṁgoṇḍe ". The fifth, and last stone (fig. 7) in the row, is the highest of any, being 6′ 3″ long, and has three panels on the front, and a surmounting *kalaśa*. The lowest panel has a horse and rider, with an umbrella bearer standing behind. The central panel has a kneeling worshipper. In the upper panel is a seated *Tīrthaṁkara*, with a *Yaksha* and *Yakshī* on each side, and three lions below. On the two sides and back of the stone are inscriptions, of which the first may be translated :—

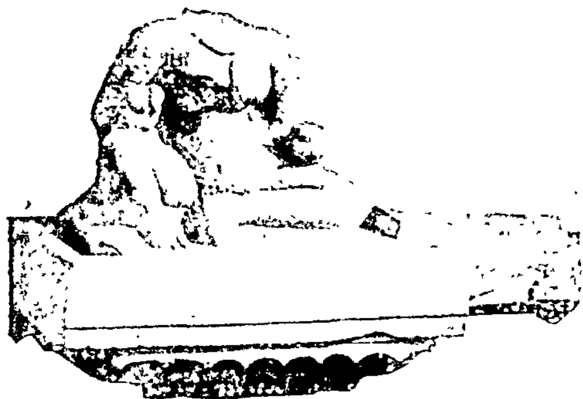


Fig. 5.

" This great warrior, the *Daṇḍanāyaka* Śrīvijaya, ruled under (his) master's orders. over the whole (earth) (encircled by) the four oceans, having put down and conquered (his) enemies with exceeding wrath.

" This sword in the hand of the ' matchless poet ' (Śrīvijaya) powerfully cuts in war and triumphs by stabbing on the battlefield the formidable array of soldiers,

having (first) scattered the huge crowds of elephants joining together (*i. e.*, protecting) the cavalry forces.

"While Śrīvijaya, the Daṇḍādhipati of the king (Narēndra) the ornament of the Bali family, is enraged, mountain, (is) no (longer) mountain, forest no forest, water no water[1] (and) the

The second reads:—"Studying the *śāstras;* praising kings; always keeping intercourse with respectable people (Ārya); discoursing on the various good qualities of virtuous men; observing silence when faults have to be exposed; kind and agreeable words to all; (and) unparalleled meditation on union with the (supreme) soul——let (all these virtues) transform (those who practise them) into *Jinēndras*, incarnate among men.



Fig. 6.

Hail! Prosperity! In 1319 of the victorious (and) increasing Śaka years, corresponding to the (Cyclic) year Īśvara, on Monday the 1st (day) of the bright half of Phālguṇa, ... seṭṭi . . . . nišidhi (?).

"Happiness! Great Prosperity! Prosperity! Prosperity!".

The translation of the third is as follows:—"The fame of 'the matchless poet' (Śrīvijaya) alighting on earth, quickly (?*Kusukuru*) filled the eight quarters, and not stopping (there), pervaded straight into the glove of him who was conceived in the lotus flower (*i.e.*, Brahman).

"O! Śrīvijaya! May your arm——which is the tree of plenty to men that seek refuge, the famous (and) veritable forest-fire to the hay (*viz.*,) the enemy kings (and) the net (laid out by) the god of Love to (catch) the lady Prosperity—protect the earth!



Fig. 7.

"O! *Daṇḍanāyaka* Śrīvijaya, ever devoted to charity and virtue! (May thou) live long protecting the earth which is encircled by the girdle of the four oceans, under the orders of (King) Indra!

"Happiness! Great Prosperity!"

Of the Jain *Tīrthaṁkaras* represented in the various sculptures, some have a cognizance, and some have not. The latter omission, as in the case of the slabs, being due to the defacing of the symbol; and, with the statues, to removal from their original positions. Some, however, retain the china. Thus, the pedestal in the second shrine has the lion, as also figures 1 and 7. Fig. 3 has a *svastika*, and another a crescent as *lāñchana*. *Sreyāṁśa* is mentioned as having a crescent.[2] Some are surmounted by a hooded *nāga*, as figure 6, 3, and one not illustrated. Fig. 3 has only a single hood: the one not illustrated has five hoods and fig. 1, seven hoods. The hood of one not represented here is broken, but has apparently been similar to that of the statue

[1] This statement means that mountains are powdered, forests cleared and waters dried up by the immense armies of Śrivijaya marching against the enemy.

[2] Dr. Burgess, *loc. cit.*

found in the square shrine. Dr. Burgess gives *Supārśva* as the one who has the lion as a characteristic, and the five snake-hoods over his head and under the usual triple crown. Other two in his list, Nos. 15 and 22, have the lion in connection with the attendants.[1]

The west limits of the acquired field, do not represent the extent of the court-yard in that direction, for the north retaining wall continues into the bank of sand. Something else may thus possibly be found in that direction. Some human bones were got under the bank at this point. The boundary on the east having been reached, no further excavation could meanwhile be made in that direction. It was, however, rumoured in the village, that in the east field, adjoining that already excavated, there were other buried remains, notably a stone built tank containing a metal car. A pit was dug at the spot indicated, and some massive walls were found a few feet underground, thus showing the correctness of the village rumour in one respect at least. The existence of a buried car has, however, yet to be proved. Nothing further could be done till this extra ground was acquired. This has since been done, and the excavations can be resumed at a future season. Some small objects, such as earthen and bone beads, glass rings, and fragments of ivory, bones and glass bangles were found in the soil during excavation. At a short distance north-east of the Jain site, a stone lion, 3′ 6″ high, was found lying in some prickly pear (fig. 8). On its head is cut a water channel. It has been the support of a *soma-sūtra* for conveying water from a shrine, probably one of those here. On the east outskirts of the village of Dānavulapāḍ, a large slab with a bas-relief of Āñjaneya, or the monkey god, was found almost completely buried underground. It is over 8′ in height. He is shown in the act of trampling a *rākshasa* under foot. (Fig. 9.)



Fig. 8.

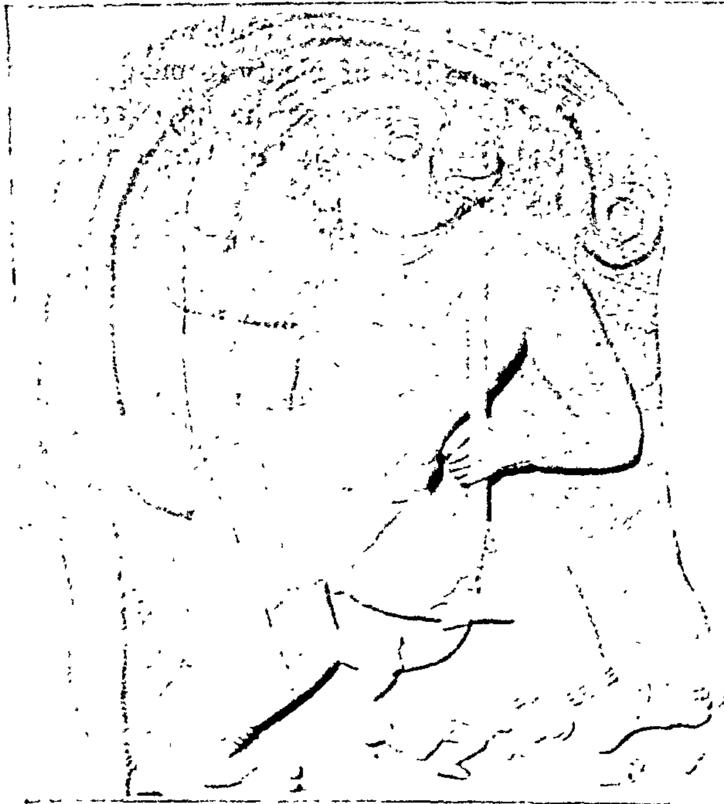


Fig. 9.

As the Jains are known to the Hindus as *rākshasas*, the sculptured slab may perhaps have a symbolical reference to the Jain overthrow and expulsion from the place. The slab is similar to many which are well

[1] *Ibid.*

known in and around Vijayanagar. It may thus signify an inroad of the Vijayanagar armies, and the destruction of the Jain shrines. The inscription very possibly bears a reference to this or a similar conflict, as also may the horseman, sculptured in the lower panel of the stone. The inscription speaks of war and a victory, but the latter may have been the precursor of a defeat in which the previous victor fell, for the stone is evidently a memorial one.

That Vijayanagar had indeed penetrated to, and exerted its influence in this direction, there is historical evidence to show, in an inscription of king Sadāśiva at the Vīrabhadra temple in Peddamuḍiyam, situated 12 miles to the north of Dānavulapāḍ. That several Jain temples still exist at Vijayanagar is well known, and that none of the Vijayanagar kings were of the Jain religion is an historical fact. The temples of that sect, though probably existing prior to or about the advent of that dynasty, still remain there in such a condition as might be expected from centuries of neglect, yet they bear no signs of wilful destruction. It is curious however, that not a single one of the chief images in these temples, which must have formed the principal object of worship to the sect, is known to exist. They must all have been destroyed or removed.

Opposite the remains of Dānavulapāḍ, the river banks are continually being washed away by the river, when in flood. Various means have been from time to time taken to check the encroachment. Among these, is a wall built in the river bank. It may first have been erected at the time these temples were in use, or before it, but has subsequently been repaired, and that evidently by stones taken from the upper walls of the second and third temples.

A. REA.

Fig. 4.—(*A*) Small terra-cotta parrot, 1½″ high.
(*B*) Terra-cotta bull, 2½″ long. Two other similar ones were also found.
(*C*) Ornamented stone plummet. (*D*) Fragmentary head of a terra-cotta horse.

Fig. 5.—(*A*), (*B*), (*C*), and (*G*) are earthenware vessels of various shapes; (*B*) is one foot high and has a spout on one side, and is polished.
(*D*) and (*E*) Two ear ornaments about 1¼″ long.
(*F*) Stone ring, 1½″ in height and diameter. Holes are bored through it at intervals.

Plate XXXV.

1. A stone panel, 16″ long, with the figures of Gaṇéṣa, Brahmā, Narasiṁha, Liṅgam Mahisāsura-mardinī, Śiva and Pāravatī, Nandī and other figures. A fragment of another similar panel is not illustrated.
2. A semi-transparent, stone Nandī with a long pointed stem, probably intended to be fixed on a pedestal. The illustration shows its actual size.
3. A *Nāgakanyakā* with a hooded snake.
4. Fragment of a sculptured panel. The stone is dark red. Four other similar ones are not illustrated.
5. A small stone panel, about 2½″ broad, with some image too mutilated to be deciphered.
6. A mutilated seated image. Height 2″.
7. A small panel 1½″ broad with three defaced heads and busts.
8. A black polished stone *liṅgam* wrapped in fragments of cloth. and with two wire rings for suspending around the neck. It has been worn by Lingayats. Original size.
9. A black polished stone *liṅgam* with *panivattam*. Size is that of the original. It is such as has been used by a Lingayat.
10. A round stone slab, 1½″ in diameter: with a bull's head in the centre of a ring. It might have served as a seal.
11. A small oblong panel, 4″ long, incised with a figure. This may also have been used as a seal.
12. A neolithic black stone celt, picked and polished. 5″ long.
13. Similar. 4″ long.

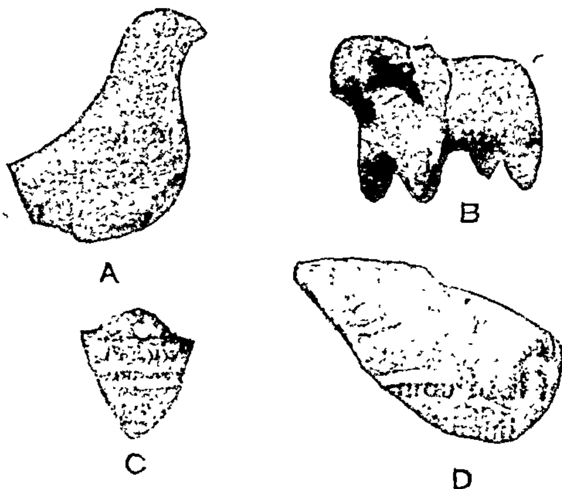


Fig. 4.

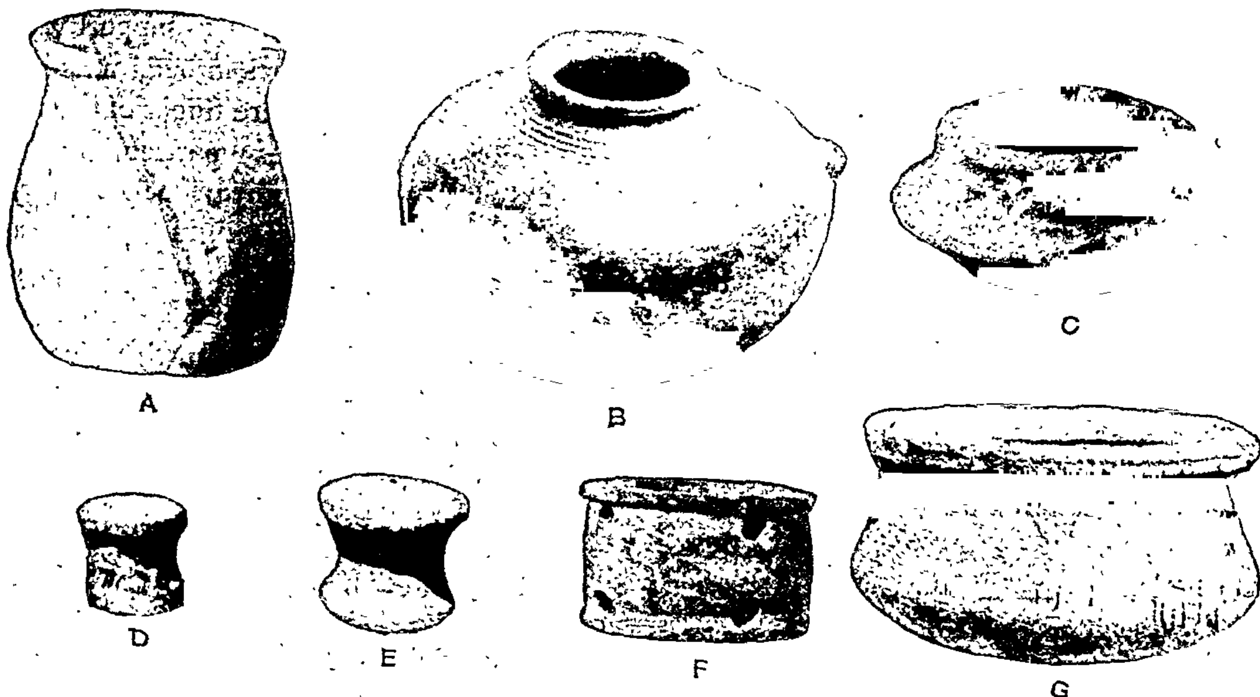
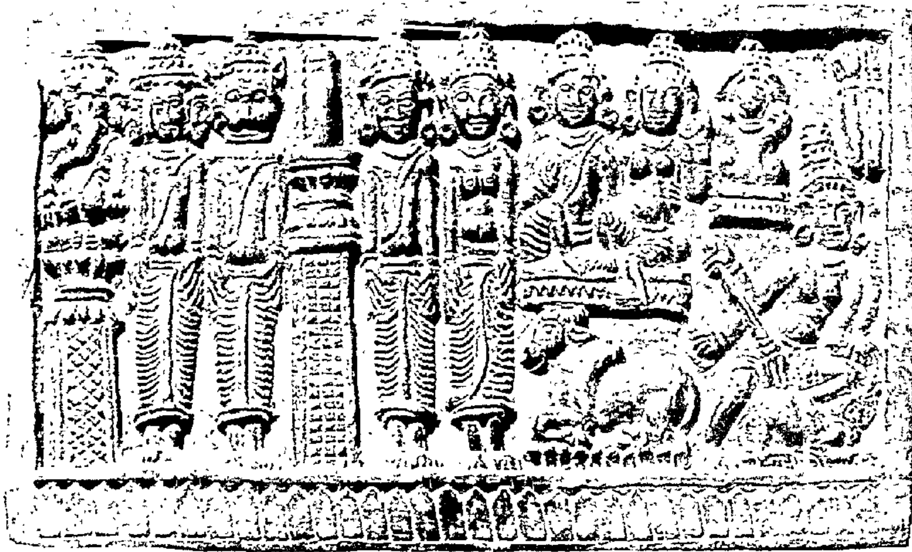


Fig. 5.

A. REA.

EXCAVATIONS AT PEDDAMUDIYAM.



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2



3



4



5



6



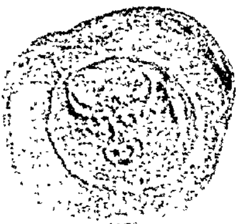
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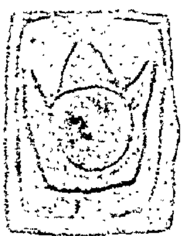
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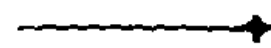
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13

MISCELLANEOUS OBJECTS.

SOME EXCAVATIONS AT PAGAN.



AMONG the myriad pagodas of almost every size and description which cover the plains around the ancient city of Pagan, there are many which are now nothing more than mere shapeless heaps of brick, with no name or tradition attached to them and of no antiquarian value as they stand. A certain number of them, however, were built to enshrine some sacred relics or emblems of Buddhism, and though the majority even of these have long since been pillaged of anything of intrinsic value which they contained, they still nevertheless afford an attractive field for excavation, and particularly for occasional digging when a few days only can be spared for the purpose, and when systematic work on an extended scale would be impossible. In the spring of last year I had an opportunity of opening two such ruined pagodas: the one situated at Kyinlo and the other near the larger Abeyadana Pagoda at Myinpagan.

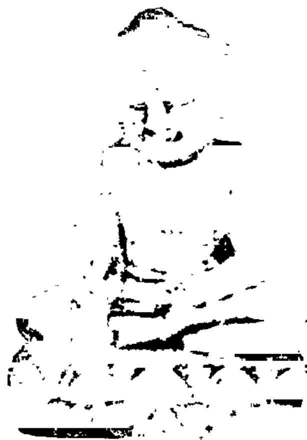
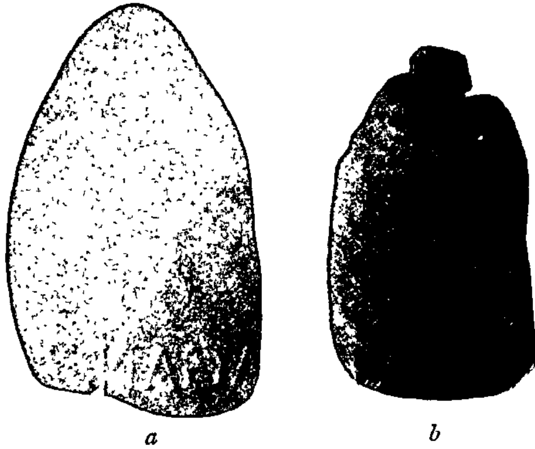


Fig. 1.

Kyinlo is the name of a deserted village about 8 miles to the south-east of Nyaung-u. It is now overgrown with grass and low jungles, and its fields have been left fallow for many years. A shaft, measuring 18 feet square, was sunk to a depth of 20 feet in the Pagoda, and the following articles were found: a stone image of Buddha, two stone receptacles supposed to be reliquaries, mutilated bronze figures of the Buddha and two disciples, two clay votive tablets, and three iron implements. The relic-chamber had evidently been rifled previously, and the treasure seekers had left what they deemed to be of no value from a pecuniary point of view.

The stone image of Buddha (fig. 1) is one foot high and 7½ inches broad. It is in the *bhūmisparśamudrā* or "earth-touching" attitude. The body is short and squat, and the features are not particularly prepossessing The ears do not touch the shoulders, and the downcast eyes wear a contemplative expression. The images in the Shwezigon and Ananda Pagodas have sharp features almost approaching the Aryan type, and their main characteristic is the well-developed chin. In the images

made at the present day in Burma, the look of asceticism is absent, and the object of the sculptors appears to be to secure beauty of form rather than to exact piety and respect on the part of the worshippers.



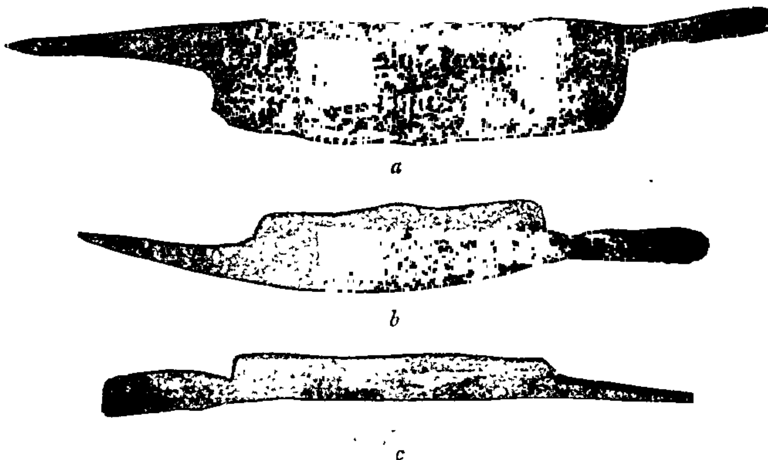
a b

Fig. 2.

Figure 2, *a* and *b*, are two receptacles, which, we may suppose, originally contained holy relics. They were empty, however, when found. The one, which has been broken into two pieces, measures 1 foot and 2 inches in length and $8\frac{1}{2}$ inches in breadth; the other is entire and its dimensions are slightly less.

The mutilated image of Buddha (Plate LIII, fig. 8) is in regal dress, and is called by the Burmese "Jambupati." It measures 6 inches in length, and 4 in breadth. The Pāli scriptures acknowledge no such representation of the Sage, and it can only be referred to the Northern School. It is apparently Mañjuśrî, the god of wisdom, who is called "Jam-yang" in Tibetan.[1] The smaller images are probably intended to represent two of the disciples of Buddha. They measure $3\frac{3}{10}'' \times 2\frac{1}{10}''$ and $4\frac{2}{5}'' \times 1\frac{1}{5}''$, respectively. All the three figures are in bronze.

Fig. 1, Plate LIII, is a votive tablet in clay, which measures $4'' \times 3\frac{3}{5}''$. It fixes the probable age of the ruined pagoda, which cannot be later than the 11th century A.D. Gautama Buddha appears under the Bodhgayâ Temple, which is flanked by two *caityas*, and the legend on the back of the tablet (No. 7), namely, "Sabbaññutañâṇassa paccayo," the "(attainment of the) basis of Supreme knowledge," expresses the pious aspiration of a *Mahâyânist.*



a

b

c

Fig. 3.

No. 4 is also a clay votive tablet measuring $4'' \times 2\frac{1}{2}''$. It depicts Gautama in the act of receiving rice porridge from Sujātā, after his severe penance. The spire of the Bodhgayâ Temple, surmounting the niche, symbolises that he has attained Buddhahood.[2]

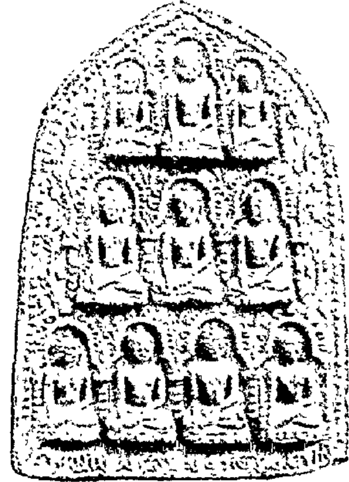
Figure 3, *a*, *b*, and *c*, measuring $5'' \times \frac{9}{10}''$, $4'' \times \frac{9}{10}''$, and $5\frac{9}{10}'' \times 1\frac{1}{10}''$, respectively,

[1] Mr. Taw Sein Ko writes that this surmise is based on three considerations: (1) the drapery of the figure; (2) the absence of the term "Jambupati" as applied to a mudrā of the Buddha in Pāli books; and (3) the phonetic resemblance of the two words "Jambupati" "and Jam-yang." None of these considerations, however, appear to afford sufficient grounds for suggesting the identity of this figure with Mañjuśrī. Nor does there seem to me any reason for assuming that the two smaller figures were intended to represent disciples of Buddha. [Ed.]

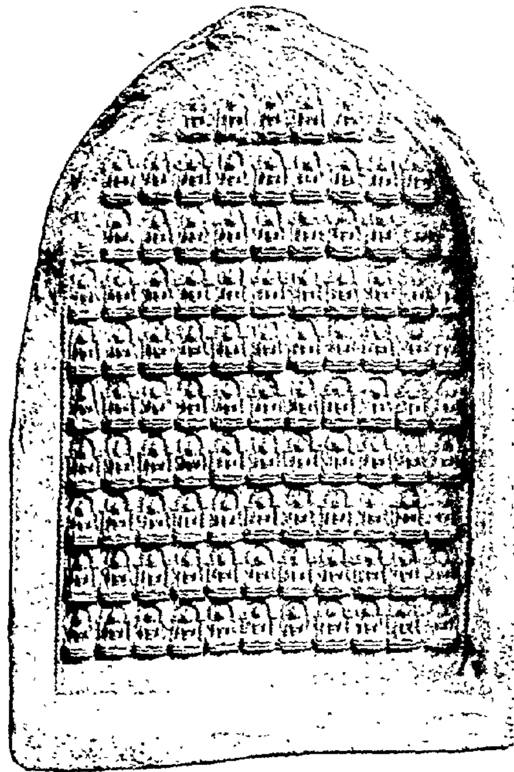
[2] I can discover nothing in this tablet to support Mr. Taw Sein Ko's conclusion that the figure on the proper right of Buddha is Sujātā. There seems to have been another figure of the same kind on the proper left, and we may take them both to be devotees. Buddha himself appears to be in the same attitude as in fig. 9, *i.e.*, in the act of attaining enlightenment. [Ed.]


1


2


3


4


5


6


7


8


9

MISCELLANEOUS OBJECTS.

are iron implements, which appear to be razors or knives of a sort, but for what purpose they were used is not certain.

The second small *stūpa* which was opened is in the village of Myinpagan. The *stūpa* in question is situated 5 feet to the south-east of the Abeyadana temple, which was constructed by Kyanzittha, King of Pagan, in 1064 A.D. The small shrine [fig. 4 (*b*)], which is one of the subsidiary buildings generally surrounding a central pagoda, is a miniature cylindrical structure rising to a height of 12 feet, and covered by an outer casing, indicating that a larger *stūpa* has been built over a smaller one. Its original form was probably like that shown in fig. 4 (*a*), which consists of a dome intersected by three bands of mouldings and surmounted by a capital and a *śikhara*. An opening 6 feet long and 5 feet wide was made into the lower section of the dome, and the articles described below were found embedded in it. No stone box or relic-chamber was met with.



Fig. 4.

Fig. 5 is a brick measuring 13½″×7″×2½″, on which are inscribed characters in an unknown script, which is probably in a Dravidian language.

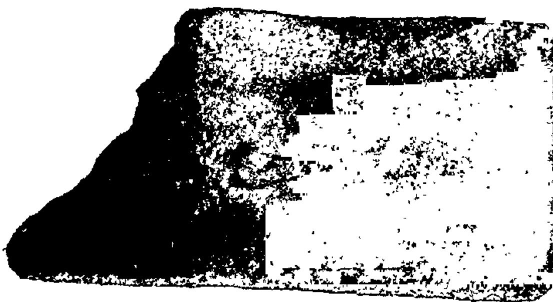


Fig. 5.

Nos. 3 and 5, Plate LIII, are votive tablets illustrating, by ten, or multiples of ten, the number of past Buddhas, who were as numerous as the "sands of the Ganges." The former contains exactly 10 Buddhas, and the latter 100.

No. 6 on the same plate is of exceptional interest, as it appears to afford some evidence of the prevalence, in Burma, of Lamaism, or the Tibetan form of Buddhism.[1] The three effigies represented on the votive tablet constitute the *Tri-Kāya* or Buddhist Trinity, namely: (i) *Dharma-Kāya* or Law-body, Essential Bodhi; (ii) *Sambhoga-Kāya* or Compensation-body, Reflected Bodhi; and (iii) *Nirmāṇa-Kāya* or Transformed body, Practical Bodhi.

[1] It is not apparent what these three figures represent, but it may well be doubted if they represent the Tri-kāya; and, even if such were the case, it would not prove them to be Lamaistic. There is certainly nothing particularly Lamaistic in their appearance. [Ed.]

No. 9 represents Gautama Buddha attaining Enlightenment, while No. 2 depicts him as turning the Wheel of the Law. Both these tablets bear Sanskrit legends. Their prototype appears to be fig. 128 at page 180 of Grünwedel's *Buddhist Art in India*. The tablets were made in Burma itself, and not imported from India, as is generally supposed, because their moulds have been found at Pagan.[1]

TAW SEIN KO.

[1] It seems likely, however, that the moulds in question were imported from India. [Ed.]

TWO SCULPTURES AT MANDOR.

FIVE miles to the north of Jodhpur is Mandor, the ancient capital of Mārwār. According to local traditions the place was first held by the Nāgavaṁśī Rajputs. They were supplanted by the Paramāras, and the Paramāras in their turn were succeeded by the Paḍihārs (Pratīhāras), whose seat of power it continued to be till A.D. 1381, when it was wrested from them by Rao Ohuṇḍā. The latter and his successors, the Rāhaṭors, reigned there till A.D. 1459, when the city of Jodhpur was founded and became the capital of Mārwār. We have at present no means of ascertaining whether the Nāgavaṁśīs and the Paramāras ever occupied Mandor, but proofs are not wanting of the place having been in the possession of the Pratīhāras. The stone found in the fort-wall of Jodhpur, the inscription on which was published in the *Jour. Roy. As. Soc.*, 1894, p. 4 ff., was originally from Mandor. The inscription sets forth the exploits of the Pratīhāra king Bauka and his predecessors. Similarly, in the ruins of the Junagaḍā at Mandor, I found in January last a fragment of an inscription stone also belonging to a Pratīhāra king. Again at Ghaṇṭiyālā, twenty-two miles W.-N.-W. of Jodhpur, two inscriptions have been discovered, one in Sanskrit and the other in Prākrit. Both of them speak of the Pratīhāra prince Kakkuka as having erected a column at Maḍḍodara. Maḍḍodara, it can hardly be doubted, is Mandor itself. Another ancient name for Mandor is Māṇḍavyapura-durga, mentioned in the Jodhpur inscription just referred to. Therein the sons of Hariścandra, the progenitor of the Pratīhāra dynasty, are represented as having conquered it by the strength of their arms and having constructed a rampart round it. Anybody who takes the trouble to survey the ruins of the *junagaḍha* and its vicinity, cannot but be convinced of Mandor being a very ancient place. The objects of antiquity met with there have been described by me in the *Progress Report of the Archæol. Survey of India, Western Circle*, for the months March 1906 to March 1907, but the oldest and most interesting of them are two *toraṇa* pillars. It is strange how Mr. Garrick in his description of Mandor does not speak of them, although they are mentioned by Colonel Tod. In the Personal Narrative of the *Annals and Antiquities of Rājasthān*, Vol. I, p. 684, Tod describes it as follows: "The chief memorials of the Purihara are a gateway and magnificent *Torun*, or triumphal arch, placed towards the south-east angle of the castle. It is one mass of sculpture; but the pencil was wanting, and I had not leisure even to bring away a rude resemblance

of the memento of some victory of the ancient lords of Mundore." The *torana* pillars, which I shall describe, were found exactly at the spot where Tod's gateway and *torana* stood. From his description it appears that the *torana* was intact in his time, and it is indeed a pity that such a magnificent monument of ancient times should have been damaged and partially destroyed within such a short space of time.

The pillars are two in number and appear to be of red sand-stone. Each has been divided into a number of compartments and has its uppermost part more or less destroyed. The lower parts of both are very much weather-worn; consequently it is impossible to identify the scenes therein sculptured. One of them had been well-nigh concealed by a thick jungle of cactus which had to be cleared before I photographed it. Both the pillars represent incidents from Kṛṣṇa's life. The pillar illustrated in Plate I is broken up into four panels, the middle two of which are damaged by the ravages of time and weather. The second panel bore an inscription in ancient characters, but it is well-nigh obliterated. The panel above the inscription represents Kṛṣṇa supporting the Govardhana mountain. The narrative concerning the uplifting of the Govardhana mountain will be found in the *Harivaṁśa*, which is the oldest work dealing with the early life of Kṛṣṇa. Briefly told it is: "It was the custom for the people of Vṛndāvana to offer worship to Indra on the 14th day of the dark half of Kārtika, but Kṛṣṇa induced them to transfer their worship from Indra to the Govardhana mountain. This made Indra indignant, and he commanded the *Saṁvartakas*, lords of the clouds, to go with all their host and pour down such a deluge as to cause destruction amongst them and their kine, and himself promised to come mounted on his Airāvata and assist them. The lords of the clouds obeyed, and the whole earth was soon converted into one whole ocean. The cowherds thought that

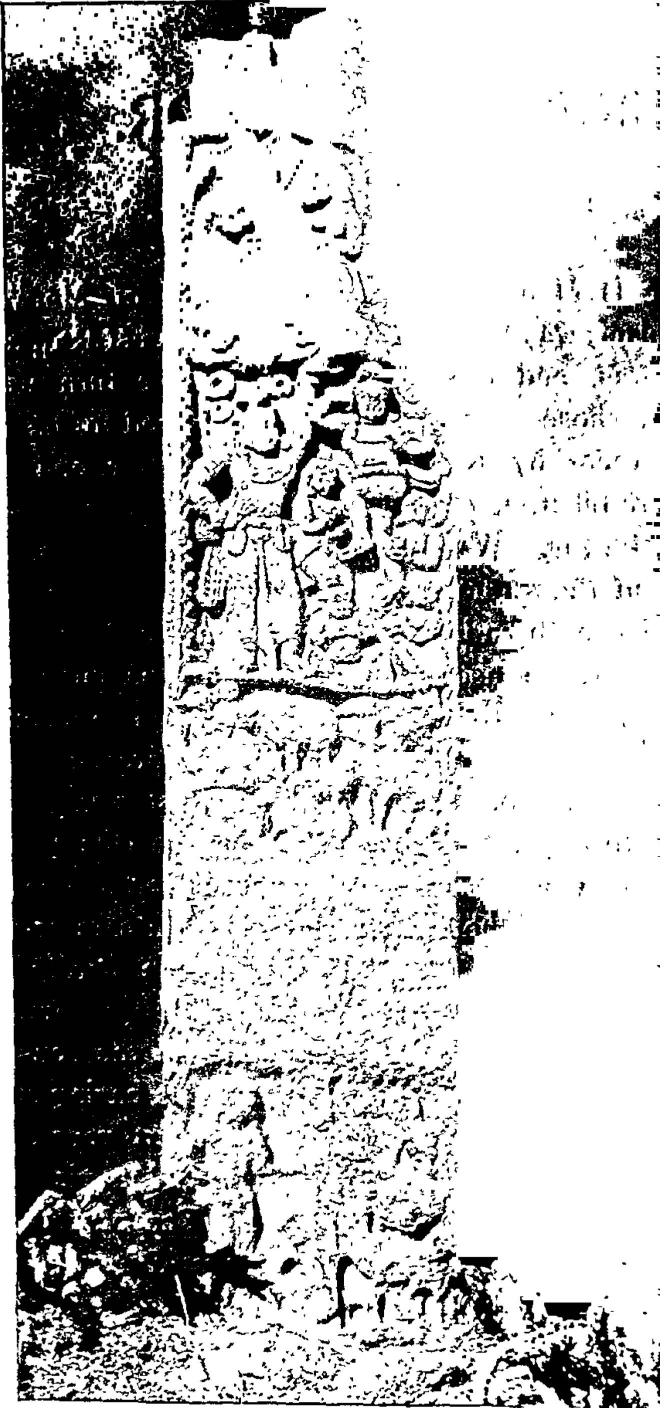


Fig. 1.

the end of the world was approaching, and came to Kṛṣṇa trembling with fear. The idea suddenly occurred to him of raising up the mountain. Accordingly he, by his divine power, pulled the mountain out of the earth and held it up high on his hand. While it was being uplifted, its peaks began to quaver, lions and tigers to roar, and serpents to stand erect and hiss. And, so long as it was so held by Kṛṣṇa on one hand, it looked like an umbrella which covered all the cowherds and their kine and did not allow a drop to fall on them. Both Indra and the lords of the clouds, after their fury was exhausted, went back on the eighth day to their abode in heaven." This is, in a nutshell, the story of Kṛṣṇa raising up the Govardhana mountain. In the first compartment of the pillar reproduced in fig. 1 is shown, at the top, the Govardhana *giri* with at least seven peaks.[1] That the mountain had peaks has already been stated above. On one of the peaks may be seen a lion on one side and apparently a lioness on the other, and below it are two serpents raising their hoods, all no doubt troubled by the mountain being dislodged from its position, as mentioned in the Harivaṁśa. It is worthy of note that here Kṛṣṇa is represented as upholding Govardhana on one hand, as described in this work, and not on one finger, as stated in later accounts. On the left of Kṛṣṇa are shown five figures, three of which are standing and two sitting. The most prominent of them, the one just below Govardhana, is, in all likelihood, Balarāma. The others are one cowherd and three cowherdesses. Down below are the cows, which, as well as the cowherds, Kṛṣṇa sheltered from wind and rain. In the second compartment was incised the inscription referred to above, of which nothing remains except a few traces sufficient to show that something was originally engraved there. The third panel appears to have been divided vertically into two parts, in the right of which may be recognised the cows. In the other part, so far as I can see, are represented two figures, of which the standing and larger one is probably of Yaśodā, working with a cord the upright churning stick in a pot below, the other sitting and smaller figure being Kṛṣṇa, who looks into the pot and apparently is in the act of taking something out of it. This depicts one of the stories of Kṛṣṇa as a child stealing butter. The fourth panel was underground when I visited Mandor last year and photographed the pillar. It is consequently not visible in the illustration. This year I revisited the place, and had a portion dug out of the ground surrounding the sculpture. This yielded the fourth compartment, which I think also is the last, as we lighted upon a paved floor below. Here we have Kṛṣṇa as an infant lying on a bed, with his right hand clutching a bird apparently as a plaything, and his left pulling one of his mother's breasts. On the other side of Yaśodā is a cart upturned. This is, doubtless, the scene of *śakaṭabhaṅga*. Kṛṣṇa, when an infant, was once sleeping under a cart, and his mother went to the Jumna to perform her ablutions. In the meanwhile, he suddenly woke up hungry, and, not getting anything to eat, began to cry and toss up his hands and feet. One of his feet struck the cart above, and upturned it. When the mother returned, she saw to her surprise the cart upturned, but was delighted to find her child safe.

Of the second sculpture only four panels are visible, and the last of these is partially buried in the ground. Both this and the one immediately above it have suffered greatly from the effects of damp and weather, and nothing has remained sufficiently clear and distinct to show what incidents in Kṛṣṇa's life they represented.

Such is not, however, the case with the remaining two. In the first and the topmost may be recognised the scene of *Dhenukavadha* or the killing of the demon Dhenuka.

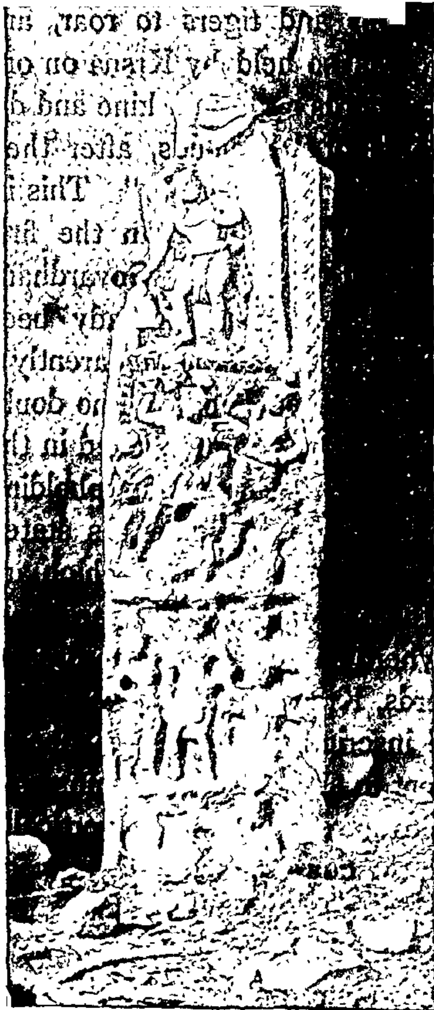


Fig. 2.

The story connected with this demon has also been given in the *Harivaṁśa* and almost all other later works professing to describe the early life of Kṛṣṇa It is as follows: "On the banks of the Jumna, to the north of Govardhana, was a forest of *tāla* or palm trees. One day as Balarāma and Kṛṣṇa were taking a stroll there with cowherds, they caught sight of the tempting clusters of the *tāla* fruit, whose fragrance had permeated the whole sylvan atmosphere. Thereupon Kṛṣṇa exclaimed, 'If so fragrant the fruit, how sweet it must be!" On hearing these words, Balarāma commenced shaking the tree and causing the fruit to fall. That forest was jealously guarded by a demon named Dhenuka and his host, all of asinine form. As soon as the sound of the fruit falling reached his ears, he made for them, bit Balarāma, and struck him on the breast with his hinder legs. Balarāma forthwith seized him by those legs, flourished him in the air, and threw him up on the palm-tree, beneath which he was standing, with the result that the ass-demon fell down with a quantity of palm fruit and with his breast, waist, and neck all shattered. After thus killing him, he destroyed his host also, and thus opened out the whole forest to the cowherds." Now, turning to the first panel, Balarāma can at once be recognised standing near and beneath a tree. The upper part of the tree has been broken off, but the few leaves that remain, as well as its trunk, leave no doubt as to the tree being a palm. Nay, just near the upper end of the stem and on its immediate proper left, has been preserved part of its fruit hanging. This shows that it was a date palm tree. Again, Balarāma is here sculptured as clutching the demon by his left hinder leg only and not by both the hinder legs, as the *Harivaṁśa* informs us. This could have happened only before he flourished and flung up Dhenuka. Of the latter only the hoof of his front left foot is gone; in other respects he is well preserved; his asinine head, especially, can be distinctly noticed.

In the second panel, Kṛṣṇa is represented as trampling upon and taming the cobra known as Kāliya. Kāliya was a five-hooded serpent, who, for fear of Garuḍa, left the ocean, and was inhabiting a large deep pool in the Yamunā. In consequence of the presence of Kāliya and his followers, the whole pool had been emptied of all aquatic birds and animals. Neither animals nor men dared approach it or drink its water. One day, as Kṛṣṇa was enjoying a ramble by the side of the Yamuna, he saw the pool. A thought entered his mind that if he curbed the cobra and drove him away from the

pool, he would be conferring a great favour on the cowherds. Accordingly he climbed a *kadamba* tree that was overlooking the pool, and plunged into the water. On hearing the sound the indignant cobra rose up, emitting fire on all sides from his mouths and bit Kṛṣṇa, who, however, did not die. Seeing Kṛṣṇa in this plight, the terrified cowherds, who had accompanied him, fled back to their houses and informed Kṛṣṇa's foster-father, mother, brother, and all the people of the disaster that had befallen him. They ran to the spot, crying and wailing, and to their dismay saw Kṛṣṇa, lying stiff and lifeless and encircled with the coils of Kāliya's and his followers' bodies. Their lamentations knew no bounds. Balarāma, however, who understood the whole situation, became enraged, and said aloud to Kṛṣṇa, "O Kṛṣṇa, these people think thee to be merely human, but thou art divine. Curb, therefore, this lord of serpents." As these words fell on his ears, he at once broke through the coils of the serpents, and, bending Kāliya's hoods, climbed them and began to dance. The cobra became exhausted, and prayed to Kṛṣṇa for mercy. The latter commanded him to quit the pool and go back to the ocean, and assured him that as long as the mark of his foot was on his hood, Garuḍa would not molest him.

Now, to turn to the panel, Kṛṣṇa is figured here with his left foot trampling upon the hood of Kāliya, and his right pressing down his body, which then passes, and is concealed, behind him, but emerges with the tail which he holds fast with his left hand. His right hand bears a bunch of three flowers, the central a full-blown lotus, and the side ones mere buds. Like all representations of snakes, Kāliya is here shown with the serpentine body but with a human head crowned with a hood springing from behind the neck. Near Kāliya is another cobra, probably a *nāgī*, his wife, who joined her husband in seeking refuge with Kṛṣṇa. The part of the sculpture, representing these snakes, is somewhat weather-worn, but there is no mistaking the two cobras. The person standing on the proper left of Kṛṣṇa is, in all probability, Balarāma, who is perhaps in the act of inciting him to release himself from the coils of Kāliya. On his proper right is a lotus stalk bearing an expanded flower. This and the lily held by Kṛṣṇa are meant to show that he was in a pool.

So much with regard to the identification of the scenes represented in the various compartments of the pillars. It now remains to be seen how the dress and finery are here carved. The lower dress of Kṛṣṇa consists of the loin cloth passed round the waist and then gathered in front with the folds left between the legs and reaching down to the feet. These folds are, however, tucked in behind in the case of Balarāma. The waist is tied by a scarf with both the ends loose and hanging to the knees. This lower dress bears a close correspondence to that of the figures sculptured on the Sāñcī gateways. Both wear two necklaces, one short and one long, the former consisting of a wreath of beads, and the latter of two or three strings inlaid with precious stones. Both wear large earrings, those of Kṛṣṇa in the scene of the Uplifting of Govardhana, being almost exactly like those of figures in the earlier Ajaṇṭā paintings. So far as can be seen, Balarāma has only two bracelets, one on each hand. Kṛṣṇa, on the other hand, has four bracelets, two on each hand, and also wears armlets. The head-dress, as was first kindly pointed out to me by Mr. Cousens, is probably not a turban, and the apparent boss seems to be but a tuft of the hair, the latter being drawn up upon

the top of the head with a fillet of cord tied round it close to the head, the end of the hair thus forming a tuft. There are also side appendages, which look like ram's horns, curling back from the forehead round the ears resembling in this respect the head-dress on a mediæval scale (Cunningham's Mahā-Bodhi, Plate XXIV). It will thus be seen that the costume and ornaments of the figures hardly enable us to determine the age of the sculptures. And, the inscription, which would have furnished us with more definite means to settle this question, is unfortunately, as said before, well-nigh effaced. The letter, which arrests attention most in what is preserved of the inscription, is *dyā*, but here both the medial *y* and *ā* may perhaps be looked upon as unusual and irregular, and it may be doubted whether we have here the original letter preserved. But this doubt can hardly be raised, I think, with regard to *r* which can be traced twice. But the form of this letter is met with in inscriptions not only of the first, but also of the third, century A.D. What is, however, specially worthy of note in this connection is that thick top lines, almost triangular in shape, which are characteristic of the early Gupta alphabet, and to which my attention was drawn by Mr. Cousens, are here distinct enough, and may thus, in default of a more precise criterion, be taken into consideration in deciding upon the age of the Mandor sculptures. The age of these sculptures cannot thus perhaps be pushed earlier than the fourth century A.D. But it is too premature to be positive about this matter, and it is only a thorough excavation of the site that will, in all likelihood, enable us to settle this question finally.

If I have not misunderstood Tod, he describes these sculptures as "a magnificent *Torun*"; but all the ancient *toraṇas* so far discovered, such as those at Bharahat, Sāñcī, Mathurā, and so forth, are square and carved on all sides. But the Mandor sculptures are not square, and are carved only on one side. Again, the little excavation carried on by me round one of them shows that both could not have been much higher than 12 feet. But ancient *toraṇas* are of far greater height than these. Again, the right side of the sculpture represented in fig. 1 has been uniformly hollowed a little from the top down to the foot of the peak of the Govardhana mountain, on which the foot of the lioness rests, and has afterwards been cut slantingly and chiselled smooth down to the elbow of Balarāma. There can hardly be a doubt that some other sculpture with a projecting piece rested on this by the mortise and tenon arrangement, and, considering the height which could hardly have been much more than 12 feet, it is not unreasonable to suppose that they probably were portions of door jambs, such as still exist, *e.g.*, at Sirpur in the Central Provinces, where we have, on the extreme right and left, similar panelled scenes from the life of Viṣṇu, one above the other.

D. R. BHANDARKAR.

JAINA ICONOGRAPHY.

(i) Sakunika-vihara.

IN para. 24, pp. 41—42 of the Progress Report of the Archæological Survey of India, Western Circle, for the months July 1905 to March 1906 inclusive, I have made the following remarks with reference to a Jaina sculpture in the *gūḍha-maṇḍapa*, or closed hall, of the temple of Neminātha at Kumbhāriā, about fourteen miles north-east of Dāntā, the chief town of a Native State of the same name in the Mahī Kānthā Agency, Bombay Presidency. "The most interesting of these objects of worship is a slab on which are sculptured, on its right side, what appears to be a *tīrtha* or river, and on the other, a tree with four figures below, three on one side and one on the other, this latter in the attitude of shooting arrows at a bird on the tree above. The epigraph incised below describes it as *Śrī-Munisuvrata-svāmi-bimbam-aśvāvabodha-sa-malikā-vihāra-tīrth-oddhāra-sahitaṁ*. The latter portion of this is not quite intelligible to me, but the former seems to show that the image of Muni-suvrata, the 20th *tīrthaṁkara*, formed part of the sculpture. The word *tīrtha* occurring in the latter portion explains the part of the sculpture on the proper right side, which, as I have just said, represents a *tīrtha* or river; but the name of the *tīrtha* and other details mentioned therewith are not quite clear." It will be seen that neither the purport of the inscription nor the details of the sculpture were intelligible to me when I wrote the above account; and naturally I was eagerly looking to Mr. Cousens to throw some light upon the matter, especially as he was on Mount Abu for a long time and had a drawing made there of an exactly similar sculpture in a corridor cell of the temple of Tejapāla. But Mr. Cousens made only the following observation in a footnote: "This is interesting as it depicts a deliberate instance of the taking of life, so abhorrent to the Jainas. It is doubtful whether the boats depicted here are true representations of those of the period. They are probably a sculptor's fancy." This hardly added to my knowledge, and the sculpture remained as much a mystery to me as before.

Now, I have just remarked that a sculpture almost exactly like this is to be found in a subsidiary cell of Tejapāla's temple on Mount Abu, and have also said so in a footnote in giving the above account of the sculpture in the Progress Report. I was

able to visit this temple last season, and to my surprise I found that the corridor cell, in which the sculpture was placed, was dedicated to Munisuvrata-svāmī, showing that these sculptures were somehow connected with that *tīrthaṁkara* as the inscription implied. Fortunately for me, a very learned Jaina Jati, of the name of Pravartaka Mahārāja Muni Śrī-Kāntivijayi, was present there when I was on Mount Abu, and he was kind enough to explain to me the details of the sculpture. But he was not able to refer me to any Jaina work wherein his account had been given. But, having once got the clue, I was able to find from various inquiries made that the same account had been published by Mahārāja Śāntivijayaji in a weekly called the *Jaina*. But here, too, we are not informed by him to what original source he was indebted. An idea suddenly occurred to me that, as Aśvāvabodha and Śakunikāvihāra were *tīrthas*, an account of them must certainly have been given in the Jaina work entitled *Tīrthakalpa*. I secured three manuscripts of it, and found my efforts at last crowned with success. And the following attempt to explain the details of the sculpture is being made after a perusal of the description therein given.

In the first place, it is necessary to correct one or two mistakes which have crept into the transliteration. Not knowing the meaning of the inscription I separated the letters *samalikā* into *sa-malikā*. I thus took *sa* to be a prefix substituted for *saha* and combined with nouns to form compound adjectives or adverbs. But, as will be seen further on, *samalikā* is one single, and not a compound word signifying "a female kite." It is, in fact, the Sanskritised form of the Gujarātī word *samaḷī*. Similarly, I took *Aśvāvabodha* to be two separate words, although, being the name of a place, it ought to have been understood as one word. With these emendations the transcript runs as follows: *Śrī-Munisuvrata-svāmi-biṁbam-Aśvāvabodha-samalikā-vihāra-tīrth-oddhāra-sahitaṁ.* The inscription evidently speaks of three things: (1) an image (*biṁba*) of Śrī-Munisuvrata-svāmī, (2) Aśvāvabodha *tīrtha*, and (3) Samalikâvihāra *tīrtha*. We know that Munisuvrata was the twentieth *tīrthaṁkara*, and we can see his image actually represented in the first-half of fig. 2, but very little is known about Aśvāvabodha and Samalikāvihāra. As I have said above, a description of both these *tīrthas* is given at length in the chapter called *Aśvāvabodhakalpa* of the famous *Tīrthakalpa*. The whole text is in Prakrit, but a fairly good substance of it so far as it pertains to the *Aśvāvabodha-tīrtha* itself has already appeared, as an addition, in the analysis of the *Śatruñjaya-māhātmya*, published in *Ind. Ant.*, Vol. XXX, p. 293. It is, therefore, unnecessary for our present purpose to give any extract from the original text, and it will be quite sufficient to quote here the account given in the analysis just referred to. It is as follows:—

"Placing his son on the throne, Munisuvrata, along with other (1,000) kings, obtained *dīkshā* on the 10th of Phālguna śuddha in Śrāvaṇa nakshatra, and on the 10th of Phālguna vadya at *Śrāvaṇa nakshatra* a temple was built of the lord Munisuvrata, which was celebrated by Indra and the Gods. The lord then set out on foot to instruct the world, and arrived at Pratiṣṭhāna (Paiṭhaṇ); there he discovered (by meditation) that a horse, who had been his friend in the previous life, was to be killed in the morning at an *Aśvamedha* (horse sacrifice) to be performed in the town of Bhṛgukacha, and immediately started off, and on the way took rest for a moment at Siddhapura, where consequently a temple was erected at dawn by king Vajrabhṛt.

Early in the morning the lord reached Bhṛgukacha, a distance of 60 *yojanas*, and took his station in the Koranṭaka forest, where he was reverenced by gods and by Jitaśatru, the governor of the town, accompanied by his army and the horse. The Muni then taught the assembly thus:—'This world is a terrible wilderness; here, surrounded by evil beasts, a helpless being or sojourner is tormented by demons; while walking in the divine path he is tied with four ropes and annoyed by a wicked forester; and he is defended only by a pious and honoured man. To protect the helpless is religion and a duty calculated to give all happiness, etc.' The preacher being asked by Jitaśatru whom this advice benefited, he replied—"no one except the horse." King Jitaśatru said, "Master, who is this horse, that has obtained virtue—though a beast?" The Muni replied:—"In the past existence I was a king of Campā, and this friend of mine was then my councillor, by name Matisāguru; but engaging in bad deeds, he died and after several transmigrations he became a dishonest grocer named Sāgaradatta in the city of Padminīkhaṇḍa, and formed a friendship with a Śrāvaka called Jinadharma. They learnt from a Jaina teacher of the advantage a man obtains by erecting an Arhat temple of jewels, gold, or earth, *viz.* the destruction of all his evil deeds in the next life of the builder of such a temple. Accordingly, Sāgaradatta erected an excellent Jina-temple outside the town, placing an image in it, and also a lofty Śiva-temple to the east of it. On a summer day he went to the Śiva-temple, where he observed the worshippers taking white ants out of *ghī* pots and crushing them under their feet. He felt uneasy and began to clear the temple with his own cloth. The chief worshipper continuing his work told him he was perhaps deceived by white-clad heretics as he vainly pretended to protect insects by unseemly means. Sāgaradatta thought with himself that these highly honoured but wicked men would ruin themselves and their master (*i.e.* himself). He died and became this horse of yours; but in virtue of the merit he had acquired in his former life by erecting a temple to the Jina, I have come to save him (365).

Hearing this account the horse remembered his former life, and fasting in meditation for seven days, he expired and became a god in the eighth heaven—named Sahasrāra. But while meditating he (the god) remembered his former life, and, coming down to earth, he placed an image of Munisuvrata in the centre of the gold temple at Campā and an image of a horse at Bhṛgukacha, and so fulfilled the desires of the followers of Munisuvraṭa. From that time Bhṛgukacha became celebrated for its holy place called Aśvāvabodhaka. So also the Narmadā, from Suvrata Arhanta having bathed in it, became a holy river with power to make the helpless to become lords."

The above account agrees almost exactly with that given in the *Tīrthakalpa* with, however, one material difference, which, therefore, deserves to be noticed. Here we are told that the image of Munisuvrata was placed by him in the golden temple at Campā, but the concluding portion of the Aśvāvabodha narrative in the *Tīrthakalpa* distinctly informs us that it was at Bharukaccha that a temple to Munisuvrata was caused to be constructed exactly on the spot of the *samavasaraṇa* of the *tīrthaṁkara*, and that, in this temple, the image in question was installed, and an equine statue set up in commemoration of his birth as a horse. Since that time Bharukaccha became known as *Aśvāvabodha-tīrtha*, but in course of time, adds the *Kalpa*, that

place became famous by the name of Śakunikāvihāra, the account whereof given therein in Prakrit is here reproduced as follows:—

इहेव जंबुद्दीवे सिंहलदीवे रयणासयदेसे सिरिपुरनयरे चंदगुत्तो राया। तस्स चंदलेहा भारिआ। तीसे सत्तण्हं पुत्ताणं उवरि नरदत्तादेवीआराहणेणं सुदंसणा नाम धूआ जाया। अहीअ कला विज्जा पत्ता जुव्वणं। अन्नया अत्थाणे पिउच्छंगगयाए तीसे धणेसरो नाम नेगमो भरुअच्छाओ आगओ। छिज्जपासट्ठिअतिअडुअगंधे वाणिएण छीयंतेण नमो अरहंताणं ति पढिअं। सोउं मुच्छिआ सा। कुट्टिओ अ वाणियओ। पत्तचेतणा एय जाईसरणमुवगया एसा। दट्ठूण धम्मबंधुत्ति मोइओ। रण्णा मुच्छाकारणं पुच्छिआए तीए भाणिअं। जहाहं पुव्वभवे भरुअच्छे नम्मयातीरे कोरिंटवणे वडपायवे सउलिआ आसि। पाउसे असत्तरत्तं महावुट्ठी जाया। अट्ठमदिणे छुहाकिलंता पुरे भमंती अहं वाहस्स घरंगणाओ आमिसं घित्तुं उड्डीणा। वडसाहानिविट्ठा य अणुपयस्सागएण वाहेण सरेण विद्धा। मुहाओ पडिअं पलं सरं च गिण्हित्ता गओ सो सट्ठाणं। तत्थ करुणं रसंती उवत्तूण परिअत्तणपरा दिट्ठा एगेण सूरिणा। सित्ता य जलपत्तजलेणं। दिन्नो पंचनमुक्कारो। सद्दहिओ अ मए। मरिऊण अहं तुम्ह धूआ जायत्ति। तओ सा विसयविरत्ता महानिबंधेण पिअरे आपुच्छिअ तेणेव संजत्तिएण सद्धिं पट्ठिआ वाहणाणं सत्तसएहिं भरुअच्छे। तत्थ पोअसयं वत्थाणं पोअसयं दव्वनिचयाणं एवं चंदणागरुदारूणं धन्नजलिंधणाणं नाणाविहपक्कन्नफलाणं पहरणाणं एवं छ सया पोआणं। पण्णासं सत्थधराणं पण्णासं पाहुडाणं एवं सत्तसयवाहणजुत्ता पत्ता समुद्दतीरं। तओ रण्णा तं वाहणवूहं दट्ठुं सिंहलेसरअवक्कंदसंकिणा सज्जिआए सेणाए पुरखोभनिवारणाय गंतुं पाहुडं च दाउं सुदंसणाआगमणेणं विन्नत्तो राया तेण संजत्तिएण। तओ सो पच्चोणीए निग्गओ। पाहुडं दाऊण पणमिओ कन्नाए। पवेसमहूसवो अ जाओ। दिट्ठं तं चेइअं विहिणा वंदिअं पूइअं च। तित्थोववासो च कओ। रण्णा दिण्णे पासाए ठिया। रायणाय अट्ठ वेलाउलाइं अट्ठसया गामाणं अट्ठसया वप्पाणं अट्ठसया पुराणं दिण्णा। एगदिणे अ जित्तिअं भूमिं तुरंगमो चरइ तित्तिआ पुव्वदिसाए जित्तिअं च हत्थो जाइ तत्तिआ पच्छिमाए दिण्णा। उवरोहेण सव्वं पडिवन्नं। अन्नया तस्सेवायरिअस्स पासे निअपुव्वभवं पुच्छइ। जहा भयवं केण कम्मुणा अहं सउलिआ जाया कहं च तेण वाहेण अहं निहयत्ति। आयरिएहिं भणिअं। भद्दे वेयड्ढपव्वए उत्तरसेढिए सुरम्मा नाम नयरी। तत्थ विज्जाहरिंदो संखो नाम राया। तस्स विजयाविहाणा तुमं धूआ आसि। अन्नया दाहिणसेढीए महिसगामे वच्चंतीए तुमए नईतडे कुक्कुडसप्पो दिट्ठो। सो य रोसवसेणं तए मारिओ। तत्थ नईतीरे जिणाययणं दट्ठूण वंदिअं भयवओ बिंबं परमभत्तिपरवसाए तुमए। जाओ परमाणंदो। तओ चेईयाओ निग्गच्छंतीए तुमए दिट्ठा एगा पहपरिस्समखिन्ना साहुणी। तीए पाए वंदित्ता धम्मं वाहिआ अज्जाए तुमं। तुमए वि तीसे विस्सामणाईहिं सुस्सूसा कया। चिरं गिहमागया। कालेण कालधम्मं पव्वन्ना अट्टज्झाणपरा। इह कोरंटयवणे सउणी जाया तुमं। सो अ कुक्कडसप्पो मरिऊण वाहो संजाओ। तेण पुव्ववेरेणं सउणीभवे तुमं बाणेणं पहया। पुव्वभवकयाए जिणभत्तीए गिलाणसुस्सूसाए अ अंते बोहिं पत्तासि तुमं। संपयं पि कुणसु जिनप्पणीअं दाणाइधम्मं ति। एव गुरूणं वयणं सुच्चा सव्वं तं दव्वं सत्ताखित्तीए विच्चेइ। चेइअस्स उद्धारं कारइ। चउवीसं च देवकुलिया उपोसहसालादाणसालाअज्झयणसालाओ कारेइ। अनु तं तित्थं पुव्वभवनामेणं सउलिआविहारत्ति भण्णइ। अंते य संलिहणं दव्वभावभेयभिन्नं काउं कयाणंसणा सा वइसाहसुद्धपंचमीए ईसाणं देवलोगं पत्ता। सिरिसुव्वयसामिसिद्धिगमणाणंतरं इक्कारसेहिं लक्खेहिं चुलसीइसहस्सेहिं चउसयसत्तरेहिं च वासाणं अईएहिं विक्कमाइच्चसंवच्छरो पयट्टो। जीवंतसुव्वयसामि-

अविक्खाए पुण एगारसलक्खेहिं अट्ठाविसूणपंचणवइसहस्सेहिं च वासाणं विक्कमो भावी। एसा सउलिआविहारस्स उप्पत्ती। लोइअतित्थाणि अणेगाणिं भरुअच्छे वट्टंति। कमेण उदयणपुत्तेण वाहडदेवेण सित्तुञ्जपासायउद्धारे कारिए तदणु जेण अंबडेण पिउणो पुण्णत्थं सउलिआविहारस्स उद्धारो कारिओ। मिच्छदिट्ठीए सिन्धवादेवीए अंबडस्स पासायसिहरे नच्चन्तस्स उवसग्गो कओ। सो अ निवारिओ विज्जावलेण सिरिहेमचन्दसूरीहिं।

TRANSLATION.

Here in Jambudvīpa in the island of Ceylon in the country of Ratnāśaya in the town of Śrīpura there flourished a king (named) Candragupta. His wife was Candralekhā. After (giving birth to) seven sons she had, by propitiating the goddess Naradattā, a daughter named Sudarśanā. On mastering arts and lores, she arrived at maturity. Once while she was sitting, though somewhat inappropriately, on the lap of (her) father, there came from Bharukaccha (Broach) a merchant called Dhaneśvara. While sneezing in consequence of the smell of the three spices (*viz.*, black and long pepper and dry ginger) lying close beside a physician, he uttered (the words) *Namo Arahaṁtāṇaṁ*. On hearing (them) she fainted. And the merchant was beaten (by the people). As soon as she regained her senses, she remembered (her) previous birth. On seeing (him), she set him free, (declaring) that he was a brother in religion. Being questioned by the king as regards the cause of her having fallen into a swoon she said as follows:—"In (my) former existence I was a female kite (living) on a banian tree in the Koraṁṭa Forest on the banks of the Narmadā in Bharukaccha. In the rainy season there was a heavy downpour of rain for seven consecutive days. On the eighth day, being oppressed with hunger, I roamed in the town, and flew away on seizing a piece of flesh from the courtyard of a huntsman's house. And while perching on a branch of the banian tree, I was struck with an arrow by the huntsman who followed close behind. On picking up the piece of flesh dropped from my mouth and the arrow, he went to his place. There I was seen by a *Sūri* while I was crying piteously, and, after turning round, was tossing about. And I was sprinkled (by him) with water from his water-pot, and was taught the Five Salutations. And I put faith in them, (and) after death was born your daughter." Thereupon becoming indifferent to worldly objects, she took leave of (her) parents after great importunity, and set out for Bharukaccha, accompanied by seven hundred vehicles in conjunction with that very voyaging merchant. Of these there were one hundred vessels for clothes, one hundred vessels for quantities of precious things, similarly one hundred each for sandal and aloe-wood, for corn, water and fuel, for sweetmeats and fruit of various kinds, (and) for weapons—thus (in all) six hundred vessels; there were fifty (again) for armed men, (and) fifty for presents. Thus with seven hundred vehicles she approached the sea-coast. While the army was being held in readiness by the king (of Bharukaccha), who on beholding that array of the vehicles was afraid of an attack by the ruler of Ceylon, the voyaging merchant thereafter landed to allay the agitation (of the people) in the city, offered a present, and respectfully informed the King of Sudarśanā's arrival. He (king) then started to meet (her) on the way. The princess offered (him) a present, and saluted. And there were great rejoicings in connection with her entrance (into the city). She visited the temple, and, in accordance with the prescribed rites paid

her obeisance, and did worship. And she observed a fast (in honour) of the *tīrtha* (sacred place). She resided in the palace assigned by the king. As royal allowance she was given eight ports, eight hundred villages, eight hundred forts (and) eight hundred towns. And she was given as much land on the east as could be traversed by a horse in a single day, and on the west as much as could be traversed by an elephant. All (this) was accepted through pressure (from the king). One day she interrogated that very same preceptor about her previous birth as follows: "Revered sire, by

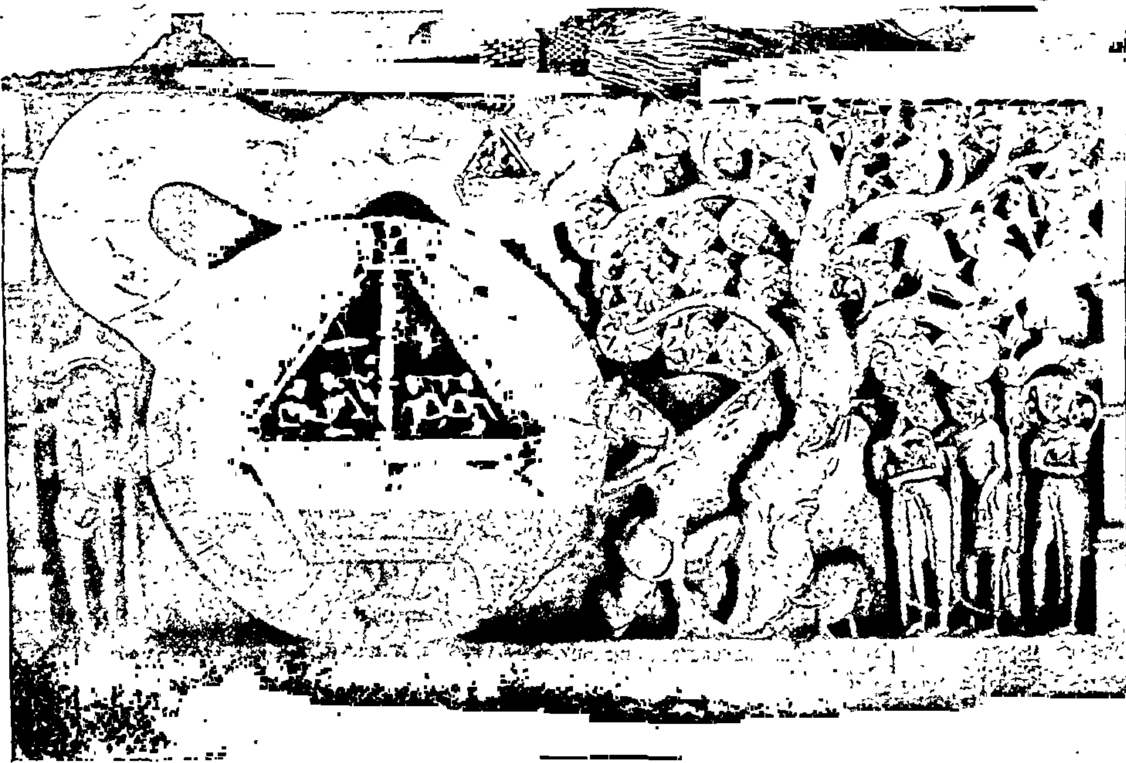


Fig. 1.

what deeds did I become a kite, and how was I killed by that huntsman?" The preceptor said "O! blessed one, on the Vaitāḍhya mountain in the north of it there was a town named Suramyā. There was a king there by name Śaṁkha, Lord of the Vidyādharas. You were his daughter, of the name of Vijayā. Once, while you were travelling, you saw a *Kukkuṭa-sarpa* (a snake resembling a fowl) on the banks of a river near the village of Mahisha in the southern regions. He was put to death by you through anger. There on the banks of the river you saw a temple of Jina, and saluted the image of the Divine one with profound devotion. You were greatly delighted. As you were going out of that temple, you saw one female (Jaina) ascetic depressed with fatigues of (her) journey. On throwing yourself at her feet, you were taught *dharma* by the venerable (woman). You, on your part, caused her to rest, and attended upon her. You returned home late. In course of time, you paid your debt to nature (with your mind) intent upon *Aṭṭha-jjhāna*. Here, in the Koraṁṭa forest, you were born a kite. And that *Kukkuṭa-sappa*, after his death, became a huntsman. In your birth as kite, you were struck with an arrow by the huntsman through previous enmity. By (your) devotion to Jina and service to the depressed (woman) done in your former existence, you eventually attained to enlightenment. Even now continue following the religious practices, such as charity and so forth ordained by Jinas." On listening to

the words of the preceptor, she distributed all her wealth in seven spheres of charity[1]. She rebuilt the temple, and also built twenty-four subsidiary shrines, a *posaha-sālā*,[2] an alms-house, and a school-house. That sacred place was called Śakunikāvihāra[3] after (her) name in the previous birth. And at the close (of her life), after performing abstinence distinguished into *dravya-saṁlekhana* and *bhāva-saṁlekhana*,[4] she, observing a

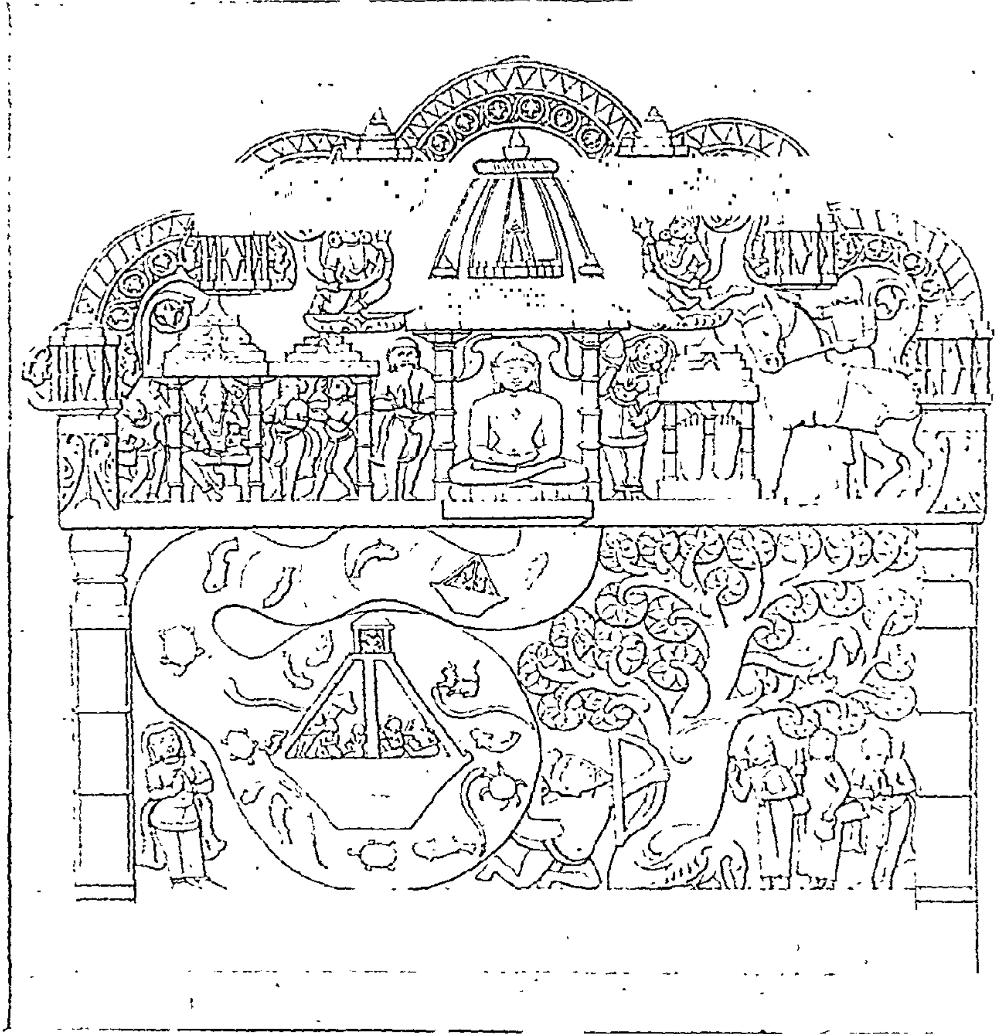


Fig. 2.

[1] The original is *saptakshetra*; see *Ind. Ant.*, Vol. XIX, p. 241, note 43.

[2] *Posaha-sālā* is equivalent to *Proṣadha-śālā*, a place where Jaina *Śrāvakas* observe the *Proṣadha-vrata*. For *Proṣadha-vrata*, see Dr. Bhandarkar's *Report on the Search of Sanskrit Manuscripts in the Bombay Presidency* during the year 1883-84, p. 115.

[3] It is worthy of note that the word for 'kite' used throughout in this account is *saūlī* or *saūliā*. *Saūliā* has been taken equivalent to *Śákunikā* (*vide e.g.* Hemacandra's *Deśīnāmamālā*), and it is no wonder, therefore, that the Sanskrit phrase *Śakunikāvihāra* is employed by Jaina writers. On the other hand, *saūlī* or *saūliā* must have passed into *savalī* or *savaliā*, and, as in Gujarātī there is a frequent interchange of *v* and *m*, must have further developed into *samalī*, which, in Gujarātī, as said above, signifies a kite; and it is from this word that the Sanskritised form *samalikā* must doubtless have been obtained which has been actually used in the expression *Samalikāvihāra* in the inscription noted at the beginning of this article.

[4] *Saṁlekhana* is of two kinds: (1) *Dravya-saṁlekhana* and (2) *Bhāva-saṁlekhana*. The first means *āhāra-tyāga*, and *āhāra* itself is divided into (1) *aśana*, (2) *pāna*, (3) *khādima*, and (4) *svādima*. *Bhāva-saṁlekhana* means *kaṣāya-tyāga*, and the *Kaṣāyas* are (1) *krodha*, (2) *māna*, (3) *māyā*, and (4) *lobha*.

fast, repaired to the (second) heaven—Īśāna—on the 5th of the bright fortnight of *vaiśākha*. The era of Vikramāditya was established after the lapse of 1,184,470 years after the absolution of Śrī Suvrata-svāmī. And 1,194,972 years after the birth of Suvrata-svāmī, Vikrama was to flourish. This is the genesis of Śakunikāvihāra. There are numerous ordinary *tīrthas* in Bharukaccha. In process of time, after the restoration of the temple at Śatruṁjaya was completed by Bāhaḍadeva, son of Udayana, the renovation of Śakunikāvihāra was carried out by Aṁbaḍa for the spiritual merit of (his) father. Annoyance was caused by the heretical goddess Siṁdhavā while Aṁbaḍa was dancing on the top of the temple, and it was set at rest by Śrī-Hemacandrasūri by the prowess of his learning.

The above account, excepting the concluding portion of it, is quite intelligible and clear, and calls for no further elucidation. The mention of Aṁbaḍa having rebuilt the Śakunikāvihāra *tīrtha* requires, however, to be more fully explained. Aṁbaḍa (Āmrabhaṭa) and Bāhaḍa (Vāgbhaṭa) were both sons of Udā (Udayana), who was a minister of the Chaulukya sovereign Kumārapāla. When Udayana became mortally wounded in his fight with the king of Surāṣṭra, he expressed a wish to his sons that they should for his sake repair the temple of Ādīśvara on Śatruñjaya and the Śakunikāvihāra at Broach. In the *Kumārapāla-prabandha*, Merutuṅga has given a detailed account of these repairs, and, with regard to the Śakunikāvihāra, we are informed that Kumārapāla, Hemācārya, and the Jaina congregation of Aṇahillapura attended the ceremony of erecting the flag-staff in the temple of Srīsuvrata, and that, at the instance of the king, the rite of waving a light before the idol (*ārātrika-maṅgala*) was also observed. And then, at the conclusion of the ceremony, as Hemācārya had come to bid adieu to Āmrabhaṭa, the former saw the latter dancing on the top of the temple through pleasure. Just at that moment, some annoyance was produced by the goddess Saindhavī. Hemācārya, comprehending what had taken place, went, with the flight of a bird and accompanied by Yaśascandragaṇi, to the environs of Bhṛgupura (Broach) where the goddess was, and threw grains of rice in the wooden mortar before her, while Yaśchandragaṇi was dealing blows to her with a pestle. At the first blow the temple shook, and at the second the idol of the goddess moving from its place fell at the feet of Hemācārya crying for mercy. Thus, says the author of the *Prabandhacintāmaṇi*, did Hemācārya return to the temple of Śrīsuvrata, after restraining, by the strength of his faultless learning, the evil caused by the heretical sylvan spirits.

Let us now revert to the inscription incised below the sculpture found in the temple of Neminātha at Kumbhāriā. We have seen that it refers to three distinct things: (1) an image of Śrīmunisuvrata, (2) Aśvāvabodha *tīrtha*, and (3) Śakunikāvihāra *tīrtha*, and speaks of the *uddhāra* or restoration of the two latter. And we have now fully, in the light of the information given in the *tīrthakalpa*, understood what these *tīrthas* were and who restored them. It now remains to identify the details of the sculptures. Turning to the illustrations, it will be seen that while fig. 1 represents the original itself, fig. 2 is reproduced from a drawing of the original. The sculpture in Tejapāla's temple on Mount Abu, of which fig. 2 is an illustration, is in a subsidiary cell dedicated to Śrīsuvrata, and, as the cell is very small, it was impossible to photograph it, and a drawing had consequently to be made of it. It will be seen that the sculpture represented in fig. 2 is whole and entire, but that in fig. 1 is only the lower

half of the original. For fuller details, therefore, we have to depend upon fig. 2. Now, the temple of a *tīrthaṁkara* depicted in the centre in the upper half of this figure is evidently that of Srīmunisuvrata-svāmī, referred to in the inscription and spoken of as having been built originally by the horse, afterwards rebuilt by Sudarśanā and further repaired by Aṁbaḍa. The horse and the man standing beside him and restraining him, who are carved on the proper left, can easily be identified with the sacrificial steed which Munisuvrata saved, and with Jitaśatru, the governor of Bhṛgukacha, from whom he freed the steed. On the proper right of the temple are, in one panel, a warrior sitting with a sword in his right hand and a child on his lap. There can hardly be a doubt that they are Candragupta, king of Ceylon, and his daughter Sudarśanā, who, we are told, was sitting on the lap of her father when Dhaneśvara, a merchant from Broach, visited him. Dhaneśvara himself seems to have been portrayed in the adjoining panel with an attendant behind him bringing presents for the king. The proper right half of the lower part of the sculpture is largely occupied by a representation of what unquestionably is a river. The various aquatic animals such as the tortoise, *makara*, eel and other fish as well as its meandering course do not leave even the shadow of a doubt as to its having been intended for a river. And this river can be no other than the Narmadā, over a part of which Sudarśanā must have sailed before reaching Broach. In the river are represented two vessels doubtless belonging to Sudarśanā's fleet. In the larger of these, the woman, over whose head an umbrella is held by a servant from behind, must be Sudarśanā. The remaining part of the sculpture represents Sudarśanā's birth of *śakunikā*. The kite on the tree is herself as *śakunikā*, and the tree is the banian tree on which she lived in the *Koraṁṭa* forest. The man, figured below in the attitude of shooting, is the huntsman, who discharged an arrow at her. The kite, it will be remembered, stole away a piece of flesh from the huntsman's house, and, in fig. 1, the kite is properly represented as eating the piece of flesh though it does not seem to have been doing so in fig. 2. There is another kite represented down below, which is to be understood as the *śakunikā* dropped on the ground when pierced with the arrow. Near her are two Jaina ascetics, one holding a gourd and both, brooms. One of them is doubtless the ascetic, who sprinkled her with water and taught her the *pañcha-namaskāra*, by means of which she was born daughter to the king of Ceylon. On fig. 2, in both the lower corners, are shown standing one female and one male, the latter with beard and both with hands folded. They do not appear to form part of the scene representing the life of Sudarśanā as *śakunikā*. In fig. 1 their places are reversed, and they are shown as distinct from the scene depicted there, by each being carved in a panel. The same man and woman are apparently sculptured standing by the shrine of Munisuvrata. Who they are, cannnot be positively determined, but a conjecture may be hazarded that they are Aṁbaḍa and his wife. The practice of persons keeping their statues and those of their relatives in the temples they built or rebuilt is too common to require any proof. And, as the inscription refers to the *uddhāra* or restoration of the Aśvāvabodha and Śakunikāvihāra *tīrthas*, and is later than the time of Aṁbaḍa, it is not unlikely that, when he repaired the temple, he had his own and his wife's images set up there.

D. R. BHANDARKAR.

A NEW FIND OF PUNCHMARKED COINS.

IN November 1906 certain coolies, engaged in clearing away some earth from the southern edge of the Government House grounds in Peshawar, found at a depth of about 9 or 10 feet a small undecorated earthenware vessel containing a large number of badly corroded coins, which they divided among themselves. As soon as this fact was reported to me, I consulted with the Deputy Commissioner, and, thanks to the energetic measures he took, 61 of the coins were recovered, though it is to be feared that some had already been disposed of in the bazaar.

On examination the find proved to consist exclusively of punchmarked coins, and in view of the infrequency with which the exact provenance of such finds has been recorded, it has seemed advisable to publish these in more than usual detail, because the find spot of these particular coins being definitely known, the collection is of special interest.

So much has already been published about this class of coins in general, that few introductory remarks are called for. The method of their manufacture out of rods or bars of metal, cut for the most part into oblong cubes whose weight was then adjusted by clipping the corners, their departure from the Greek type of coinage both in standard of weight and in the nature of the marks impressed upon them, as well as their other special characteristics, are all given in Rapson's "Indian coins" (page 2) and elsewhere. For our purposes it will be sufficient to state that according to the consensus of opinion among numismatists, they appear to be the oldest known coinage of India, to be of indigenous origin and to represent that "minted silver" which Quintus Curtius tells us Omphis, the Rājā of Taxila, presented to Alexander. All this invests them with considerable interest, and although the total absence of legends or other written characters upon them makes it difficult to determine the date or source of the individual coin, still it seems probable that more detailed and systematic study of the symbols with which they are adorned, will lead to sound conclusions regarding the class as a whole. That these symbols have already been discussed at great length by Theobald in the J. A. S. B. for 1890 (Vol. LIX), is well known, but no one can read his article without being struck by the uncertainty of many of his identifications and the fancifulness of others. Furthermore, an examination of the present collection tends to disprove certain of his statements, and as the genuineness of the specimens is beyond all question and their provenance definitely known, the fact is rendered the more interesting and significant.

The first large question which presents itself is the religious significance of the symbols used. Are they Hindu or Buddhist in character? That some are the latter has long been recognized and that others are Hindu seems practically certain. Moreover, I am inclined to believe, and there is certainly no *a priori* reason against the belief, that the two classes of symbols will be found *in general* to fall apart, the more pronouncedly Buddhist occurring together and *vice versâ*. Not that a hard and fast line can be drawn, for, as is well known, certain of the symbols were used by both religions simultaneously. A differentiation, however, into Buddhist and Hindu coinage will, I believe, be of assistance in the interpretation of many of the symbols and tend to a lessening of that arbitrary fancifulness in identification which the methods hitherto followed have usually ended in. Thus I would suggest that where the so-called solar wheel is found associated with other symbols of a predominatingly Buddhist nature, it should be interpreted rather as the Dharmacakra. Similarly the branch in like association would be a symbol of the sacred Bo-tree. In this way it appears to me one is much more likely to arrive at a sound and systematic understanding and classification of these coins than by any inquiry, however learned, into the ultimate origin of such symbols in general.

Working along these lines therefore, I believe that I am justified in ascribing a Buddhist origin to a certain large proportion of the coins in the present find. It is not contended that the matter is beyond question, but the probabilities appear to me to be strongly in favour of this conclusion. I find, namely, that 5 of the symbols are constantly associated together, *viz.*, (following Theobald) (1) the solar wheel, his fig. 139, (2) the branch, his fig. 85, *etc.*, (3) the *stūpa*, his fig. 51, (4) the humped bull before a taurine, (but not "couchant" in these coins), his fig. 16, and (5) a figure generally of the type called by him a central sphere supporting 3 *chatras* with intervening taurines, inadequately represented by his fig. 94. Considering at first the identifications given: in the first place the so-called *stūpa* is unsatisfactory. No *stūpa* that I am familiar with looks the least in the world like the symbol in question, whereas definite and unmistakable representations of these structures occur in ancient art which are what they should be and what alone could be expected. I would propose, therefore, either to abide by Cunningham's old term of chaitya, meaning a chaitya cave whether in façade or in section (*cf.* the illustration No. 58 in Fergusson's Indian and Eastern Architecture, p. 123) or to call the symbol a vihāra in Fergusson's sense of the word and to understand it as representing some such structure as that shown in fig. 67, *op. cit.* (p. 134). But in any case, the Buddhist origin and significance of the symbol has not been questioned. This being established I would see in the "Solar wheel" a Dharmacakra. The wheel as used conventionally is even commoner among the Buddhists than among the Hindus and whatever its origin or primary significance, there is certainly nothing to adduce against the assumption that in connection with Buddhist emblems it represents the familiar Buddhist wheel of the Law, however Solar it may have been originally. Furthermore no fancifulness is required to see in the branch an abbreviated emblem of the Bo-tree, the sacred tree *par excellence* among the Buddhists. The Hindus do not possess any exact counterpart of this tree. That is to say, no actual and individual tree is so sacred in Hindu story as this Bo-tree and the use of such a symbol among the Hindus could never

have such full significance in consequence. In other words, the symbol gains in significance and importance on being interpreted as Buddhist, which makes it reasonable, at least, so to interpret it.

Thus without doing any violence to our evidence, we have good reason for assuming that 3 of the 5 symbols in this group are Buddhist in character. This fact in turn lends probability to the assumption that the others are likewise. And to one working along these lines the conviction is easy that in the so-called sphere-supporting 3 chatras with intervening taurines (even granting that this analysis is correct and that these are the original elements; for we are not so much concerned with ultimate elements as with finished and accepted symbols whose constituent parts may very well have been but dimly understood) we have a highly conventionalized lotus. It is true that reference to fig. 94 in Theobald's article is not likely to establish this identification but, as mentioned above, the figure very inadequately represents the symbol. To begin with, the surrounding circle of the depression is omitted, and furthermore, in the present coins at least the taurines are in size very much better proportioned to the chatras. If the figure were shown as the symbol actually appears on the coins (*cf.* for instance the one occurring in the lower left hand corner of coin No. 3 on Plate LIV, A) the resemblance would be much plainer. Indeed, on some of the coins of the present collection it is so striking as to be well-nigh irresistible. At any rate, such identification is in my opinion much simpler and more natural than any other and is supported by the fact that in this way the symbol is made more intelligible and is brought into more natural association with the others.[1] They all gain coherence and significance and mutually explain one another. For although the lotus as such is certainly not an exclusively Buddhist emblem, at the same time it is so omnipresent in the Buddhist art of all periods, that it is at least appropriate and harmonious in any group of however distinctively Buddhist elements.

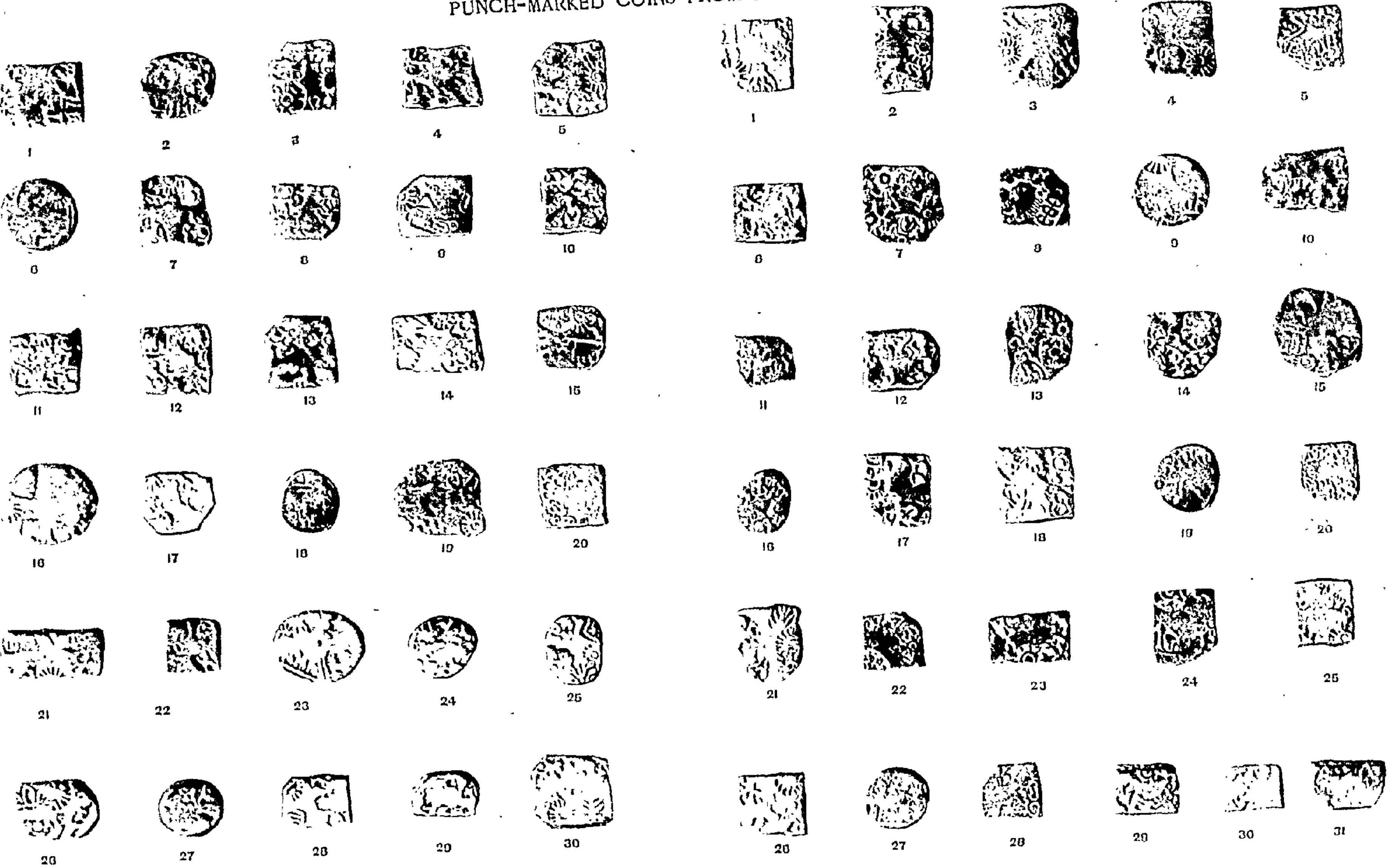
The only one of the five which is not so easily shown to be Buddhist is the humped bull with the taurus mark. I confess that I do not know of such a symbol in Buddhist iconography. But on the other hand, its occurrence on these coins, even granting their Buddhist nature, need not necessarily be anomalous. As stated above, it is known that many symbols especially in those early days were current among both communities with or without a difference in significance, and there is nothing inherently impossible, nay, nor improbable that the sacred figure of the bull should have been retained here and there in popular favour by those Hindus who had gone over to the Buddhist teaching. For it is only fair and reasonable to point out that the Buddhists were themselves merely Hindus of another sect. I am inclined therefore to think that those coins among the present lot which show this group of five symbols namely the chaitya, the dharmacakra, the branch, the lotus and the bull, are of a sufficiently well-defined nature to be classed as Buddhist, notwithstanding the fact that one of these symbols is more familiarly associated by us with the Hindus.

Nor does the early date usually ascribed to these coins necessarily disprove or even seriously militate against this theory. It is the class as a whole which is put down as pre-Alexandrine in origin. No one can date individual coins among the class within several centuries, and the present specimens, therefore, may well enough be

[1] It should be noticed that even if Theobald's analysis is followed, the symbol still remains Buddhist.

PLATE LIV.

PUNCH-MARKED COINS FROM PESHAWAR.



no older than the 2nd or 3rd centuries B. C. It is known that Aśoka sent missionaries to the Frontier in the middle of the 3rd century B. C. and these coins *may* not be older than Aśoka's times. But, even if they were, there is no *a priori* reason for supposing that Buddhism had never been heard of on the Frontier before the arrival of Aśoka's evangelists. Indeed such a theory is distinctly against the probabilities. Taxila was in those days the learned centre of India, the University town to which students flocked from all over the country, and, *ipso facto*, the greatest scholars and thinkers of the age also. It is incredible to my mind that the greatest religious teacher of the age, and the greatest religious movement, should have remained unknown and undiscussed for three whole centuries in *the* intellectual centre of the land; when, too, we have historical evidence of the intercommunication between Magadha and the far Frontier, not alone for Aśoka's time but even for that of his grandfather. Nay, it seems altogether idle to suppose any such thing, and even if the present coins could be shown definitely to belong to the 4th century (which they unfortunately cannot be) I should still be inclined to feel that the bulk of the evidence they afford is sufficient to establish them as Buddhist, in other words to prove them the coinage of some particular Buddhist prince or other Buddhist authority.

For that is another point of interest to note in regard to these coins. It has been stated by various authorities that the symbols are arbitrary figures, the arbitrary marks of particular moneyers, perhaps, and that they were punched into these coins from time to time by these different authorities as they chanced to come into their hands. But my tabulation of the marks occurring on the coins of the present collection tends directly to a refutation of this view. The above-mentioned group of 5 symbols occurs on 20 of the 61 coins in the collection, with one symbol regularly in each corner, and one, with like regularity the dharmacakra, impressed on one edge and overlapping the nearest two. This alone would have rendered the old theory doubtful, but when it is added that in every case where the punchmark on the reverse was decipherable it was found to be what Cunningham called the "Taxila mark," we have an invariable concomitance established between a particular group of 5 symbols on the obverse and a particular "mint mark" on the reverse, which cannot conceivably be lacking in significance and which points decidedly to these coins having been the regular coinage of some one accepted central authority, and the symbols or their selection the recognized insignia of the same, *not* the private marks of individual moneyers impressed haphazard from time to time. And this alone adds a fact to our knowledge of this coinage as a whole which is full of meaning.

Of the single coins in the present collection, No. 18 of Plate LIV A is perhaps the most interesting. Human figures are not absolutely rare on punchmarked coins, but they are nevertheless comparatively so. Other examples will be found in Rodgers' "Coin Collecting in Northern India," Plate 1, in Cunningham's "Coins of Ancient India," Plate 1, No. 11, and in Theobald, fig. 1. But although the present coin also as well as all those mentioned above, shows three figures, one man and two women, still an examination of the coin in detail does not support Theobald's contention that we have here a polygamous king with his two wives. The spacing of the three figures on our coin shows that the man and the woman to the right constitute a definite pair separated by a slight space from the woman on the left, nay, still closer examination

of the original discloses at the extreme left edge of the coin, to the left of the last woman's head, another headdress similar to that worn by the male of the other couple, so that it seems certain that the original stamp or punch did not show one man and two women, but two couples, the fourth figure falling without the dimensions of the coin, as so often happens. Another fact of interest in connection with this coin is the occurrence of the peacock on both obverse and reverse. In the latter case it stands alone and not so far as I can see on a "*stūpa*," as Theobald says, but rather on a pair of somewhat overdeveloped feet. The occurrence of this figure elsewhere also in conjunction with the device of the human figures (*cf.* Rodgers, *loc. cit.*) leads to the thought, furthermore, that this combination of symbols may also be constant, which would give us another distinct type among punchmarked coins. Unfortunately there is only one coin of this class in the present collection, and I have therefore been limited in comparing it with other specimens to such plates as have been published. But a comparison of originals is much to be desired, and might lead to interesting results.

The determination of the quadruple nature of this device of human figures, furthermore, tends in turn to discredit Theobald's ingenious theory about the symbol designated by him "Three huts" (his fig. 59), which is seen plainly in Nos. 6 and 9 of Plate LIV A to this article. Instead of seeing in this symbol the huts of the above-mentioned man and his two wives, would it not be more natural to consider it a simple variation of the chaitya motif?

Another identification of Theobald's which calls for mention is that of his figure 118 (seen lying sideways, on No. 1 of Plate LIV A to this paper), which he calls "a food receptacle for birds." I must be pardoned if I agree rather with that forerunner of his, whom he quotes, in thinking that this device *is* hard to interpret. In the first place I am not aware of any representation of an ancient begging bowl with, as Theobald puts it, "two ears on one side, representing the ends of the band, by which the bowl is partly supported round the neck of the mendicant friar, as he wanders around to collect the offerings of the pious;" and there is no dearth of representations of this object in the Gandhāra school alone. Furthermore, it is not stated what special propriety there would be in the association of two taurus marks with a receptacle of the kind. In these circumstances, therefore, it would seem better to confess frankly that we do not know at present what the symbol does represent. Such confession appears at once sounder and more scholarly than so forced an identification as the one quoted above.

I would suggest, also, that the interpretation given by Theobald for his fig. 136 which is, however, far from satisfactory as a representation of the device), which is seen best in the present collection on No. 8 of Plate LIV B is not altogether convincing. He regards it as a modified form of the *caduceus*, but remarks himself on the curiousness of the fact that "when once established" it "should have fallen into desuetude in India, as it is essentially related to the lord of life, Mahadev, whose worship is still so popular there." It is also curious, or would be if the fact were established, that such a familiar and significant object as the snake should come to be so sadly misunderstood and misrepresented in a land where the tendency has been rather to metamorphose other mistaken objects into serpents, regardless of propriety; witness the

sometime garland borne by little Eroses in the art of Gandhāra. Is it not possible, on the other hand, that the chance and admittedly partial resemblance of this figure to the *caduceus* misled one too familiar with classical symbolism and that the real identification is to be sought along altogether different lines? It occurs for instance on six coins in the present collection. In view, therefore, of my contention that we should try in so far as possible to interpret a given symbol in the light of its associates, let us enquire with what other figures it occurs. The first instance is on coin No. 27 of Plate LIV A, and the others with it are two crescents back to back (representing probably an incomplete chaitya with surmounting crescent as usual), the lotus (?), and the wheel. The next is on No. 8 of Plate LIV B, associated apparently with two lotuses, the reverse showing two very faint marks, possibly an arrangement of taurines about a central boss, and the chaitya motif. The third is on No. 16 of Plate LIV B, associated with the wheel, the reverse showing the peacock. Again on No. 20 of Plate LIV B, with the lotus, the wheel, a branching plant(?) and a hare, the reverse being indistinct. Also on No. 25 of the same plate, where only the wheel can be made out with certainty and on the reverse the "*caduceus*" itself; and lastly on No. 31, Plate LIV B, associated with the wheel and the chaitya, the reverse showing a tree. In other words, it is regularly associated, so far as the evidence afforded by the present collection goes, with symbols predominatingly Buddhist, not one of those named above being in any way specially or essentially "related to the lord of life Mahadev." That is to say, it appears on coins of a seemingly Buddhist character. Our next enquiry is, therefore, can the symbol be interpreted in terms of Buddhism? And the answer is a decided affirmative. Poor as a *caduceus*, the figure is excellent as a *tee*, and what simpler or more natural than that the *tee*, the crowning point of the *stūpa*, should be included in the comprehensive symbolism of this coinage? And how vastly more harmonious an association than that of the alien *caduceus*.

Nor need we abandon this identification of the symbol through any fear of anachronism, however thoroughly we may agree with M. Foucher's exposition of the development of the *stūpa*. For the famous gates at Sanchi and the Bharhut remains show numerous representations of *stūpas* with the most elaborate finials (*cf. inter al.*, Plate 49 of Burgess's "Anc. Mon., etc., of India.")

Without going into further details therefore, for a complete list of the symbols is given at the end of this article, I would say in conclusion that the main results of my study of these coins is the conviction that a more careful division of this coinage into Buddhist and Hindu types, wherever such classification is possible, and a simpler and more natural effort to explain the individual symbols *in the light of their associates*, so as to bring the devices into intelligible and significant harmony as grouped together, will lead to a considerable increase in our understanding of the coinage as a whole. Further tabulation and definition of these groups is also desired, for it seems only reasonable to suppose not only that other constant groups can be established, but that other invariable concomitances between these and particular "mint marks" can be shown. In other words that little by little we shall be able to fix an increasing number of distinct types, and in this way to bring order out of the chaos hitherto prevailing in regard to this interesting branch of Indian numismatics.

D. B. SPOONER.

Chart showing Distribution and Grouping of the Symbols on the Obverse.

PLATE A.

Coin No. ↓ / Symbol →	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u
1	a	b	c			f?	g														
2	a	b	c	d	e																
3	a	b	c	d	e																
4	a	b	c	d	e																
5	a	b	c	d	e																
6	a		c?	d	e			h?													
7	a	b	c	d	e																
8	a	b	c?	d	e																
9			c?	d	e			h?													
10	a	b	c	d	e																
11	a	b	c	d	e																
12	a	b	c	d	e																
13	a	b	c	d	e																
14	a	b	c	d	e																
15				d				h?	i	j											
16	a	b?		d				h			k?										
17	a			d	e			h													
18												l	m								
19	a			d	e?									n							
20	a	b	c	d	e																
21	a			d	e			h?													
22	a			d	e?																
23	a			d	e										o						
24	a		c?	d	e																
25	a			d											o	p?	q				
26	a			d	e											p					
27	a?			d	e?													r			
28	a	b?	c?	d				h?													
29	a				e																
30	a			d	e?														s		

Chart showing Distribution and Grouping of the Symbols on the Obverse.

PLATE B.

Coin No. ↓ / Symbol. →	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
1	a?			d	e					j?													
2	a	b?	c	d	e																		
3	a			d	e					j?													
4	a			d				h															
5	a			d	e							l?											
6	a	b	c	d	e																		
7	a?			d	e																		
8	2a's?																	r					
9	a			d	e																		
10	a?			d																			
11				d	e																		
12	a	b.	c	d	e																		
13	a?			d	e											p							
14	a	b?	c	d	e																		
15	a			d	e										o								
16				d														r					
17	a	b	c	d	e																		
18	a	b	c	d	e																		
19	a			d	e?																		
20	a			d													q?	r			u		
21	a			d																		v	
22	a?			d																			
23	a	b	c	d	e																		
24	a			d																			w?
25				d														r					
26	a	b	c	d	e																		
27				d																			
28	a			d																			
29	a			d	e																		
30	None recognizable.																						
31				d	e													r					

Catalogue of the Symbols with Abbreviations.

a.—Conventional lotus.

b.—Humped bull with taurus mark.

c.—Branch.

d.—Wheel.

e.—Chaitya.

f.—Marine monster(?).

g.—2 taurines under cross with surmounting vessel.

h.—Elephant.

i.—2 fish (?) under

j.—Triçula (?).

k.—4 taurus marks under a cross.

l.—Peacock.

m.—Human figures.

n.—2 taurus marks under a fig.

o.—2 or 4 fish in a tank.

p.—Taurus marks about central boss.

q.—Branching plant.

r.—Tee.

s.—Tree.

t.—6 taurus marks about central circle.

u.—Hare.

v.—Palm tree.

w.—Water plant.

Table for the conversion of Māshas and Ratis into Grains Troy, at 14·64 grs. to the Māsha.

	R	1	2	3	4	5	6	7
M		1·83	3·66	5·49	7·32	9·15	10·98	12·81
1	14·64	16·47	18·3	20·13	21·96	23·79	25·62	27·45
2	29·28	31·11	32·94	34·77	36·60	38·43	40·26	42·09
3	43·92	45·75	47·58	49·41	51·24	53·07	54·90	56·73
4	58·56	60·39	62·22	64·05	65·88	67·71	69·54	71·37
5	73·20	75·03	76·86	78·69	80·52	82·35	84·18	86·01
6	87·84	89·67	91·67	93·33	95·16	96·99	98·82	100·65
7	102·48	104·31	106·14	107·97	109·80	111·63	113·46	115·29
8	117·12	118·95	120·78	122·61	124·44	126·27	128·10	129·93
9	131·76	133·59	135·42	137·25	139·08	140·91	142·74	144·57
10	146·40							

Descriptive Catalogue of the Coins.

ABBREVIATIONS :

u. l.=upper left hand corner.
l. l.=lower left hand corner.
u. r.=upper right hand corner.
l. r.=lower right hand corner.
u. e.=upper edge.
r. e.=right edge.
b. e.=bottom edge.
l. e.=left edge.

PLATE LIV, A.

No.	Weight.		Obverse.	Reverse.
	Māsha.	Grains.		
	m. r.			
1	3 2	47·58	u. l. conventional lotus; l. l. wheel; u. r. marine monster?—l. r. 2 taurines under cross with surmounting vessel; b. e. humped bull.	Tree and one mark others confused and indistinct.
2	3 1	45·75	u. l. humped bull with taurine: l. l. branch; u. r. conventional lotus; l. r. chaitya with crescent; r. e. wheel.	"Taxila" mark.
3	3 5	53·07	u. l. branch; l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; u. e. wheel.	"Taxila" mark.
4	3 3	49·41	u. l. branch; l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; b. e. wheel.	"Taxila" mark.
5	3 4	51·24	u. l. branch; l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; r. e. wheel.	"Taxila" mark.
6	3 1	45·75	u. l. conventional lotus; l. l. elephant?; u. r. wheel; r. e. chaitya; upper centre a confused symbol possibly the branch.	Traces of a seemingly triangular mark now unrecognizable. Compare No. 9.
7	3 2	47·58	u. l. branch; l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; u. e. wheel.	"Taxila" mark.
8	3 4	51·24	u. l. conventional lotus; l. l. humped bull with taurine; u. r. chaitya; l. r. branch?; r. e. wheel.	"Taxila" mark.
9	3 3	49·41	u. l. wheel; l. l elephant?; u. r. chaitya; l. r. wheel; upper centre, indistinct mark possibly the branch.	Indistinct triangular mark something like a chaitya with a line underneath and two other marks unrecognizable, *cf.* No. 6.

No.	Weight.		Obverse.	Reverse.
	Māsha.	Grains.		
	m. r.			
10	3 3	49·41	u. l. chaitya; l. l. humped bull with taurine; u. r. conventional lotus; l. r. branch; l. e. wheel.	"Taxila" mark.
11	3 4	51·24	u. l. humped bull with taurine; l. l. branch; u. r. conventional lotus; l. r. chaitya with crescent; u. e. wheel.	"Taxila" mark.
12	3 3	49·41	u. l. branch: l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; u. e. wheel.	"Taxila" mark.
13	3 4	51·24	u. l. conventional lotus: l. l. humped bull with taurine; u. r chaitya; l. r. branch; r. e. wheel.	"Taxila" mark.
14	3 7	56·73	u. l. branch; l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; u. e. wheel.	"Taxila" mark and one other indistinct.
15	3 4	51·24	u. l. 2 fish? under ; l. l. a figure resembling a triçula; u. r. ?; l. r. elephant?; u. e. wheel.	A mark possibly an elephant with two circles (?) above to left. Faint traces of 2 other marks.
16	3 0	43·92	u. l. elephant?; l. l. humped bull?; u. r. 4 taurines under cross?; l. r. conventional lotus; l. e. wheel.	One mark showing 7 (orig. 8?) balls in an ellipse. Traces of one other, perhaps a wheel and a third unrecognizable.
17	3 4	51·24	u. l. wheel; l. l. elephant; u. e. conventional lotus; right side?; l. side chaitya.	Chaitya w. surmounting crescent and traces of one other mark indistinct.
18	3 2	47·58	u. l.?; u. r. peacock; l. e. 3 human figures, being a man and 2 women, with the headdress of another man at extreme left which would seem to indicate that the figure originally consisted of two couples.	A peacock w. exaggerated feet.
19	3 3	49·41	u. l. wheel; l. l. conventional lotus; u. r. chaitya?; l. r. 2 taurines under .	Two marks both indistinct.
20	3 3	49·41	u. l. conventional lotus; l. l. humped bull; w. taurine; u. r. chaitya; l. r. branch; r. e. wheel.	"Taxila" mark and confused traces of another mark.
21	3 1	45·75	u. l. elephant?; l. l.?; u. r. conventional lotus; l. r. chaitya; l. e. wheel.	Traces of 2 or 3 marks all indistinct.
22	3 4	51·24	u. l. wheel; l. l.?; u. r. one petal of conventional lotus; l. r. 2 crescents back to back forming probably the top of a chaitya with surmounting crescent.	2 or 3 marks all indistinct.

No.	Weight.		Obverse.	Reverse.
	Māsha.	Grains.		
	m. r.			
23	3 1	45·75	u. l. conventional lotus; l. l. chaitya with line underneath; u. r.?; l. r. 4 fish in tank; l. e. wheel.	One indistinct mark possibly the branch motif.
24	3 3	49·41	u. l. uncertain, possibly branch motif; l. l. conventional lotus; u. r. chaitya; l. r. wheel.	Confused and indistinct.
25	3 1	45·75	u. l. taurines about central fig. indistinct; l. l. conventional lotus; u. r. fish in a tank; l. r. branching plant; r. e. wheel.	No marks traceable.
26	3 4	51·24	u. l.?; l. l. conventional lotus; u. r. taurines about central boss; l. r. chaitya; l. e. wheel.	One or two marks indistinct.
27	3 3	49·41	Traces of the "tee" symbol, of the wheel and 2 crescents presumably the top of a chaitya can be made out. The other marks are all confused (possible traces of a lotus?).	All indistinct.
28	3 4	51·24	u. l. wheel; l. l. elephant?; u. e. branch?; r. e. possibly humped bull; l. r. one petal of conventional lotus.	No marks traceable.
29	3 3	49·41	Part of a conventional lotus, and traces of a chaitya can be made out. Other marks indistinct.	One mark, circle with central boss and 3 whorls.
30	3 1	45·75	u. l. conventional lotus; l. l. wheel; u. r.?; l. r. tree; centre chaitya.	Confused.
			Plate LIV, B.	
1	3 4	51·24	u. l. a symbol resembling a triçula; l. l. wheel; u. r. either an arrangement of taurines or a very conventional lotus; l. e. an unusual form of the chaitya motif.	Two marks indistinct.
2	2 7	42·09	u. l. bull?; l. l. branch; u. r. conventional lotus; l. r. chaitya; l. e. wheel.	"Taxila" mark.
3	3 1	45·75	u. l. triçula?; l. l. conventional lotus; u. r.?; r. e. wheel; l. r. chaitya.	One mark indistinct.
4	3 1	45·75	u. l. wheel; l. e. elephant; r. e. conventional lotus.	3 or 4 marks, all confused.
5	3 3	49·41	u. l. peacock on pile of balls?; l. l. wheel; u. r.?; r. e. bottom of a chaitya; l. e. conventional lotus.	Bird (peacock?) on pile of balls.

No.	Weight.			Obverse.	Reverse.
	Māsha.		Grains.		
	m.	*r.*			
6	3	1	45·75	u. l. branch; l. l. humped bull with taurine; u. r. chaitya; l. r. conventional lotus; l. e. wheel.	"Taxila" mark very faint.
7	3	1	45·75	u. l. wheel; l. l.?; u. r. conventional lotus?; l. r. 6 taurines about central circle; r. e. chaitya?	One mark appearing like 2 concentric circles and traces of various other marks confused and indistinct.
8	3	1	45·75	l. e. conventional lotus?; u. r. another conventional lotus?; l. r. "tee."	Two very faint marks possibly taurines about central boss and chaitya motif.
9	3	2	47·58	u. l. conventional lotus; l. e. wheel, u. r. chaitya; l. r.?; l. e. uncertain.	Chaitya with crescent and one other mark indistinct.
10	3	0	43·92	Only the wheel and traces of a possible conventional lotus can be made out; other marks confused.	One mark indistinct possibly the "Taxila" mark.
11	3	2	47·58	u. l. wheel; l. l. chaitya; other marks confused.	One mark very indistinct.
12	3	1	45·75	u. l. conventional lotus; l. l. humped bull with taurine; u. r. chaitya; l. r. branch; r. e. wheel.	One mark indistinct, probably "Taxila" mark.
13	3	2	47·58	u. l. wheel; l. l. conventional lotus? u. r. four taurines about central boss; l. r. unusual form of chaitya motif.	2 or 3 marks, all indistinct.
14	3	1	45·75	u. l. humped bull?; l. l. branch; u. r. conventional lotus; l. r. chaitya; l. e. wheel.	"Taxila" mark.
15	2	7	42·09	u. l.?; l. l. two fish in tank; u. r. conventional lotus; l. r. peculiar form of chaitya; l. e. wheel.	Various marks, all indistinct.
16	3	2	47·58	The wheel and the "tee" can be made out, other marks confused and indistinct.	The peacock.
17	2	7	42·09	u. l. chaitya; l. l. conventional lotus; u. r. branch; l. r. humped bull with taurine; l. e. wheel.	"Taxila" mark faint.
18	3	2	47·58	u. l. conventional lotus; l. l. humped bull with taurine; u. r. chaitya; l. r. branch; l. e. wheel.	"Taxila" mark and one other apparently circle with triple whorl.
19	3	1	45·75	The wheel, the chaitya (?) and the conventional lotus can be made out. Other marks indistinct.	2 or 3, all indistinct.
20	3	1	45·75	u. l. "tee;" l. l. hare; u. r. branching plant?, l. r. conventional lotus; l. e. wheel.	Several marks, all very confused.

No.	Weight. Māsha.		Weight. Grains.	Obverse.	Reverse.
	m.	*r.*			
21	3	2	47·58	u. l.? ; l. e. wheel ; u. r. conventional lotus ; l. r. palm tree ?	One mark, quite indistinct.
22	3	1	45·75	u. e. wheel ; l. l. conventional lotus? l. r. ?	Peacock on pile of balls ? One other mark indistinct.
23	3	1	45·75	u. l. conventional lotus ; l. l. humped bull with taurine ; u. r. chaitya ; l. r. branch ; l. e. wheel.	"Taxila" mark.
24	3	2	47·58	u. l. conventional lotus r. e. wheel ; u. r. ? ; l. r. ? ; l. l. water plant ?	One mark, very indistinct.
25	3	1	45·75	The "tee," the wheel, and one taurine are traceable ; other marks indistinct.	The "tee" and one other mark indistinct.
26	3	1	45·75	u. l. conventional lotus ; l. l. wheel ; left centre, humped bull with taurine ; u. r. chaitya ; l. r. branch.	"Taxila" mark.
27	3	1	45·75	The wheel, and other marks, all indistinct.	One mark, uncertain ; apparently.
28	3	2	47·58	u. l. wheel ; u. r. conventional lotus ; other marks confused.	Three or more marks, all indistinct.
29	3	3	49·41	u. l. wheel ; l. l. chaitya ; u. r. ? ; l. e. conventional lotus.	Several confused marks.
30	3	1	45·75	Various marks, all indistinct . .	Two marks indistinct.
31	3	3	49·41	The wheel, the chaitya, and the "tee" traceable. Other marks indistinct.	Tree.

EPIGRAPHY.

THE number of inscriptions copied during the year under review was about 1,200. Of these, 605 belong to South India, 468 to Burma, 103 to the Northern, and 24 to the Western circle. No details have been forwarded from the Eastern circle. The number of inscriptions copied there was, however, quite small.

Of the *Epigraphia Indica* two parts were published, *viz.*, Parts II and III of Vol. VIII. The contents of these parts are of considerable interest. They comprise the final portion of the important Junāgaḍh inscription of Rudradāman, published by Professor Kielhorn; the Chikmagaḷūr inscription of the Western Gaṅga Nītimārga Rācamalla by Dr. Fleet; M. Senart's new edition of the Nāsik cave inscriptions; and the Dhār *praśasti* of Arjunavarman mentioned in my last report, published by Professor Hultzsch. Part IV of the same volume was passed for printing on the 7th of March 1906, but had not been published at the end of the month.

Comparatively few of the inscriptions brought to light during the year go back to the times of the Mauryas and Kuṣaṇas. But some of those found are of considerable interest. The Moravian missionary, A. H. Francke, has given information about the existence of short epigraphs in Brāhmī and Kharoṣṭhī characters in Ladakh, at Kalatse. Dr. Vogel, who has examined eye-copies of some of them, is of opinion that one goes back to the Mauryan period, while two other ones appear to belong to the time of the Kuṣaṇas. The fact is of considerable interest as showing that Ladakh had come under the influence of Aryan civilisation at an early period.

Still greater importance must be assigned to the discovery of inscriptions in ancient Brāhmī at Amarāvatī. Up to the year under review, there was nothing to show that the *Stūpa* there was older than the second or third century, and Bühler, in his Indian Palæography, came to the conclusion that the alphabet used in the inscriptions of the Amarāvatī and Jaggayyapeṭa *Stūpas* was developed out of the ornamental Brāhmī known from the Western Dekhan and the Koṅkan, in the third century A. D. We knew, however, from the epigraphs of the Bhaṭṭiprolu *Stūpa* that the Brāhmī alphabet had been used in the Kistna district as early as the third century B.C. Mr. Rea's recent discovery, an account of which will be found above, have now added considerably to the materials available for the history of the alphabet in that part of India. It will be seen that he found a number of sculptured stones and also several plain slabs and billars, many of which carried inscripions. Those incised

on sculptured stones are of the same kind as the epigraphs previously found, and it is doubtful whether any of them can be dated before the Christian era. The inscriptions found on the plain slabs, on the other hand, are inscribed in characters which must be of the Mauryan period and probably go back to the second or more likely to the third century B.C. There are at least eighteen such, of which impressions have been sent to me. They do not contain any historical information, and very few proper names. Two of them ascribe the stone to the *Dhaṁñakaṭaka* and *Dhaṁñakaḍaka nigama*, respectively. This name of Amarāvatī has long been known. Tāranātha informs us that Nāgārjuna built a railing round the great shrine of Dhānyakaṭaka. *Dhaṁñakaṭaka* is the regular Pāli form corresponding to Dhānyakaṭaka, and *Dhaṁñakaḍaka*, with the weakening of *ṭ* to *ḍ*, probably represents the vernacular form of the Kistna district in the third century B.C. The change of a *ṭ* between vowels into a *ḍ*, which already occurs in the Aśoka edicts, is common in all the Prakrits, and its occurrence in Amarāvatī does not, therefore, teach us anything about the affiliation of the Aryan dialect spoken in the Kistna district in those early days. The language of the old inscriptions is, on the whole, identical with the Pāli of Buddhist literature. The form *Dhaṁñakaṭaka, i.e., Dhaññakaṭaka,* well agrees with this, because the change of *ny* to *ññ*, according to the Prakrit grammarians, does not belong to other Prakrit dialects than Māgadhī and Paiśācī, with which forms of speech Pāli agrees in this and in several other features.

The results to be gained for the political and linguistic history of South India from these inscriptions is, accordingly, comparatively small. On the other hand, they prove that a Stūpa existed at Amarāvatī at a much earlier period than has hitherto been supposed. This conclusion is also supported by the discovery of a small seal, containing a representation of a lion, with a *svastika* between the raised left foreleg and the head, and an inscription in characters of the third century B.C. The legend is *Bhūtisa*, *i. e.* (the seal) of Bhūti, or, perhaps, *Bhūtisama*, i.e. Bhūtiśarman.

The excavations at Sārnāth brought to light some Mauryan rail inscriptions, which do not, however, contain any historical information.

The well-known Hāthīgumphā inscription of Khāravela, king of Kaliṅga, was copied during the year, and it is to be hoped that this important document will be published in a near future. It is dated in the year 165 of the Maurya era.

The excavations at Rājgir gave Dr. Bloch opportunity to copy the short inscription on the Sonbhandar cave. It shows that the cave was constructed in the second or third century of our era by a Jain for members of his order. Another inscription, in characters of the first or second century A.D., was found on the base of a Buddha statue, which had been built into the bottom of a drain in the walls of a building in Rājgir.

Some interesting documents relating to the history of the Western Kṣatrapas were brought to light at Andhau in Khāvḍā in Cutch. They consist of five stones which were found in the stores of the Engineering Department at Bhuj, where they had been transferred from their original find-place by the late Diwān Ranchhodbhāi Udairām. Four of these inscriptions refer to the reign of the same Rudradāman whose Junāgadh inscription has been mentioned above. They are all dated in the year 52, on the second day of the dark half of Phālguna, while the Junāgaḍh epigraph refers

to the year 72. If these dates are taken to refer to the Śaka era, as is commonly done, the new finds would carry Rudradāman back to A.D. 130. Rudradāman was the son of Jayadāman and the grandson of Caṣṭana, who has been identified with the Tiastanes mentioned by Ptolemy. The new inscriptions confirm the conclusion already drawn from other considerations that Jayadāman, who is simply styled *kṣatrapa*, and not *mahā-kṣatrapa*, can only have governed a very short time, if he did so at all. Rudradāman's reign, on the other hand, must have been a long one. The earliest date so far known for his son Rudrasiṁha is 103, and this date probably takes us back towards the beginning of his reign. The fifth inscription from Bhuj mentioned above couples his name with the year 114, the 12th day of the bright half of Jyeṣṭhāmūla.

The year under review has not brought to light much new material connected with the history of the imperial Guptas. The most important are a series of coins of Kumāragupta found at Nāgor and Manpharā in Cutch. It therefore seems probable that Cutch had been added to the territory of the Guptas already in Kumāragupta's time.

Of other Gupta inscriptions, I may mention a fragment found at Bhuj, the legend on a lamp post unearthed at Sārnāṭh, and an epigraph from a Buddha image found at the same place. The latter one, which belongs to the second half of the sixth century A.D., is of importance on account of its form, as it has been incised in raised letters. This is the oldest instance so far known of this way of cutting inscriptions. It mentions the friar Bandhugupta.

In this connection, I may also mention the old clay seals brought to light at another excavation, conducted by Dr. Vogel at Kasiā. They belong to the congregation of friars of the *Mahāparinirvāṇa* monastery, and their number is great enough to warrant the conclusion that the Kasiā monastery was in close contact with that of Kusinārā. The seals have apparently been attached to letters sent by the friars of Kusinārā to their brethren in Kasiā, and they do not give any indication about the name of the latter place in old times.

A stone inscription brought to Sirohi from Vasantgaḍh refers itself to the reign of a certain Rājjila, the feudatory of King Varmalāta. It is dated in [Vikrama] saṁvat 682, corresponding to A.D. 625. As shown by Professor Kielhorn, the importance of this inscription lies in the fact that it apparently settles the date of the famous poet Māgha, whose grandfather Suprabhadeva is stated to have been the minister of a king whose name is written in different ways in the manuscripts, but which has not hitherto been found in inscriptions. One of the forms is, however, Varmalāta, and as Māgha is stated to have been an inhabitant of Śrīmāla (Bhinmāl), while Varmalāta's feudatory Vajrabhaṭa, the father of Rājjila, is described in the inscription as the guardian of Mount Abu, which is only 40 miles distant from Bhinmāl, it seems necessary to infer that the correct form of the name of the king whose minister Māgha's grandfather was, is Varmalāta. No other king of that name is known, and the Varmalāta of the inscription was therefore probably king of Bhinmāl, and Māgha's grandfather was, at some time, his minister. This would bring Māgha down to the second half of the seventh century A.D. Now Professor Pathak has drawn attention to some facts which cannot well be reconciled with this date. Māgha in his poem is believed to

have alluded to the grammatical work the *Kāśikā* by Jayāditya and Vāmana, and to its commentary by Jinendrabuddhi. According to I-tsing Jayāditya died about A.D. 661-662. The fact that Jinendrabuddhi is not mentioned by I-tsing, who took especial care to gather information about Buddhist authors in India, has then been urged as proving that Jinendrabuddhi cannot have flourished before A.D. 695, when I-tsing left India. If this argument be admitted, it would of course be impossible to bring Māgha further back than to about 700 A.D.[1] The statement that Māgha alludes to the Kāśikā and its commentary, which is already found in Mallinātha's commentary, is however based on a misunderstanding of the passage in Māgha's poem, and Professor Kielhorn's arguments remain unaffected.

Some interest attaches itself to the discovery of two sets of copper-plates at Mandhātā, one of which was already noticed in my last report. Both have now been published by Professor Kielhorn,[2] who remarks that their chief importance rests with the fact that they show how Devapāla, one of the later kings of Mālava who was already known to us, was related to preceding rulers, and that they give us the names of two sons of his, Jaitugideva and Jayavarman, who, one after the other, succeeded him.

Several new inscriptions have been brought to light in Chamba. They enable us to fix the accession of Rāja Jāsaṭa at A.D. 1105, and that of Rāja Lalitavarman at A.D. 1144.

Impressions have been prepared of a copper-plate inscription of the Western Calukya king Vinayāditya Satyāśraya. The plates, which belong to the Madras Museum, are, however, subject to grave doubts, in so far as they are dated in Śaka 520, while Vinayāditya's reign falls between A.D. 680 and 696.

An inscription of Vikramāditya VI, found at Peddamuḍiyam, describes the Brāhmaṇas of Muḍivemu (Peddamuḍiyam) as the lotus tank where Viṣṇuvardhana Mahārāja (the mythical ancestor of the Calukyas) was born.

In this connection I may also note the plates of the Śālaṅkāyana Mahārāja Vijayadevavarman issued from Veṅgīpura, which have been sent in by the Collector of Kistna, though we do not as yet know with which dynasty the Śālaṅkāyanas may have been connected. The inscription is old and is written in Prakrit. It has been published by Professor Hultzsch in the Epigraphia (IX, 56 ff.).

An inscription of the Eastern Gaṅga King Vajrahasta III, of Śaka Saṁvat 984, informs us that Vajrahasta, like his grandson Coḍagaṅga, also had the name Anantavarman, but does not in other respects add anything to our knowledge of the history of the Eastern Gaṅgas.[3] Some other Gaṅga inscriptions have been copied in the Viziagapatam district.

Twenty-four new inscriptions, twenty-two from Tripurāntakam in the Kurnool district, and two from Upparapalli in the Cuddapah district, are connected with the dynasty of the Kākatīyas. The most important information gleaned from them bears reference to the reign of Gaṇapati and his successor. We learn that the former ascended the throne in A.D. 1199-1200. He had no male issue, and he therefore made his daughter Rudrāmbā his succesor and called her Rudra. One of the inscriptions

[1] See *Ep. Ind.*, IX, 187 ff. [2] *Ep. Ind.*, IX, 103 ff. [3] See *Ep. Ind.*, IX, 94 ff.

copied during the year is dated in the second year of her reign and in Śaka 1183. She must accordingly have ascended the throne in A.D. 1260-61, and Gaṇapati's reign was accordingly a long one.

The number of inscriptions of the Vijayanagara kings is, as usual, very large. We learn that the coronation of Devarāya I took place in A.D. 1406-07, and we get information about a hitherto unknown son of his, Vīra-Harihararāya ŏḍeya, who governed the country on the banks of the Bhavānī River. A copper-plate of Devarāya II refers to a younger brother of his named Śrīgiri, who governed Maratakapuri in A.D. 1424-25, and who is perhaps identical with the Pratāpa Devarāya of the Satyamaṅgalam plates. We do not know of any other brother of Devarāya, and, as pointed out by Mr. Venkayya, Śrīgiri Pratāpa Devarāya was therefore probably the prince who, according to 'Abdu'r Razzāq, made an attempt on the life of Devarāya in A.D. 1442-43.

A set of copper-plates from the Nellore district, which has been brought to light by Mr. A. Butterworth and published by Professor Hultzsch,[1] was issued from Kāñcīpuram in the second year of an hitherto unknown Mahārāja Kumāraviṣṇu II, the son of Buddhavarman, the grandson of Kumāraviṣṇu, and the great-grandson of Skandavarman.

The new Gaṅga Pallava inscriptions add a new name to the list of rulers of that dynasty, *viz.*, Vijaya-Aparājitavikramavarman, who also seems to be mentioned in the Udayendiram plates of the Western Gaṅga Pṛthivīpati II. He fought the Pāṇḍya King Varaguṇa and was himself defeated by the Coḷa Āditya I (about A. D. 880-907). Aparājita was probably the son of Nṛpatuṅga and the last of the Gaṅga-Pallavas.

The most important Coḷa inscription copied during the year comes from Tiruvālaṅgāḍu. It is inscribed on 31 copper-plates and contains much valuable information about Coḷa genealogy and the history of the different Coḷa kings. Thus we are told that Karikāla made the town of Kāñcī new with gold, and that Vijayālaya seized Tanjore. His son Āditya I put, as we have already seen, an end to the dominion of the Gaṅga Pallavas. From another Coḷa inscription, found at Grāmam in the South Arcot district, Professor Kielhorn has been able to fix the first part of A.D. 907 as the initial date of the reign of Parāntaka I.[2] A third Coḷa inscription at Tiruveḷḷarai, dated in the eighth year of Parakesarivarman, is of importance as containing the oldest reference to the worship of Kṛṣṇa and Rukmiṇī in South Indian inscriptions.

The year under review has also brought to light an inscription of considerable interest for the history of the Pāṇḍyas, at Aivarmalai in the Madras district. It gives Śaka 792 as the eighth year of the old Pāṇḍya King Varaguṇa, who must accordingly have begun to reign in A.D. 862-63.

On the occasion of a visit to the Lakṣmīnarasiṁhasvāmin temple at Nāmaskal Rai Bahadur V. Venkayya came across an odd copper-plate, which proved to belong to the fragmentary inscription of Vīracoḷa last published by Professor Kielhorn.[3] It contains an incomplete Cera genealogy, and it would be of great interest to recover the still missing plates of this inscription, which Mr. Venkayya is inclined to think are still in the possession of the temple authorities.

[1] *Ep. Ind.*, VIII, 233 ff.
[2] For a fuller note on this inscription *see* below.
[3] *Ep. Ind.*, III, 79 ff.

Some of the inscriptions copied during the year throw light on the history of the country of Koṅgu, which roughly corresponded to the modern district of Coimbatore and the southern portion of Salem, while the northern part of the latter district belonged to the Gaṅga country. Tamil literature mentions Rāṣṭrakūṭas and Gaṅgas among the rulers of Koṅgu, but no certain traces of them have so far been found in inscriptions. On the other hand, the new epigraphical finds confirm the reports of a Coḷa conquest, at least of Northern Koṅgu. The Coḷas were succeeded by the Hoysalas, who appear to have been, in their turn, ousted by the Pāṇḍya King Jaṭāvarman Sundara Pāṇḍya (A.D. 1251-61). The Hoysalas were, however, able to re-assert themselves, and retained their hold on the country up to the time when the Vijayanagara Kings became supreme.

The epigraphical work in Burma was chiefly confined to the preparation of estampages of 468 out of the 739 inscriptions formerly collected by King Bodawpaya at Pagan. They do not contain anything older than the eleventh century.

Some votive tablets with a bilingual inscription in Sanskrit and Pāli were also brought to light. They are evidently imitations of similar tablets deposited in Buddhist temples in India, especially in Bodh Gayā. The Burmese tablets are casts from a mould, and the Sanskrit legend, which states that the tablet has been prepared by King Aniruddha (Anawrata), must have been incised on the mould. On the lower rim of the tablet a Pāli legend, to the same effect, has then been incised by hand. The whole arrangement leads us to infer that the moulds have been prepared, with the Sanskrit legend, in India, and that the Pāli inscription has been subsequently added because Sanskrit was not understood. The tablets cannot, at any rate, be used to prove that Sanskrit was the language of the Buddhist church in Burma before Pāli was introduced. It has been urged that the form of the name Aniruddha instead of the usual Pāli Anuruddha points in that direction. But supposing that the mould for the tablets was executed in India, Aniruddha would be the only possible form, and the King's name, Anawrata, which can only be derived from Anuruddha and not from Aniruddha, proves, if anything, that the knowledge of Pāli had penetrated sufficiently to influence the coining of personal names.

STEN KONOW.

GRĀMAM INSCRIPTION OF PARĀNTAKA I.

GRĀMAM is a small village on the southern bank of the river Malaṭṭār in the Tirukoilūr tāluka of the South Arcot district. When I visited, in December 1905, the Śivalōkanātha temple at the village, I was told that the *gōpura* which had been dismantled in connection with the repairs then going on, was full of inscriptions. These are all now lost, as I had no information whatever of the proposed repairs and I happened to go to the village by a mere accident. During my short stay I copied a few of the more important records[1] of the central shrine which remained intact at the time. My assistant, Mr. K. V. Subrahmania Aiyar, B.A., was deputed in 1906 to prepare impressions of all the inscriptions found in the temple.

The date portion of the subjoined inscription has already been published by Professor Kielhorn.[2] It is dated "in the Kaliyuga year four thousand and forty-four, the 36th year of the reign of king Parakēsarivarman who took Madirai (Madura),—on the fourteen-hundred-thousand seven[ty] . . . . . [thousand] thirty-seventh day [after the commencement of the] Kaliyuga, ... on the day of Rēvatī, which corresponded to a Saturday of the month of Makara." By his calculation Professor Kielhorn has ascertained that the number of days from the commencement of the Kaliyuga, which is partially damaged in the text, was 1,477,037 on the date specified, which corresponded to the 14th January A.D. 943.[3] This, coupled with the Kūram date of the same king,[4] proves that the Cōḷa king Parāntaka I. commenced to reign (approximately) between the 15th January and the 25th July A.D. 907.[5] The latest date of the king is his forty-first year found in two inscriptions, one from Allūr in the Trichinopoly district[6] and the other from Tiruvāmāttūr in the South Arcot district.[7] Parāntaka's reign must, therefore, have lasted from A.D. 907 to at least 947-48. Towards the close of his reign Parāntaka probably held sway practically over the whole of the modern Tamiḻ districts of the Madras Presidency. The capital of the Cōḷa empire was apparently Tanjore, which, according to the Tiruvālaṅgāḍu plates, had been captured by his grandfather Vijayālaya.[8] But Kāñcī seems to have been equally

[1] Nos. 735 to 745 of the Government Epigraphist's collection for 1905.
[2] *Ep. Ind.*, Vol. VIII, p. 260*f.*
[3] *Ibid.*, Vol. VIII, p. 261.
[4] *Ibid.*, Vol. VII, p. 1.
[5] *Ibid.*, Vol. VIII, p. 261.
[6] No. 373 of the Government Epigraphist's collection for 1903.
[7] No. 419 of the same collection. No. 25 of 1895 found at Tillasthānam in the Tanjore district appears to be dated in his forty-fourth year, though the second digit of the date is not absolutely certain.
[8] *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 16.

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important.[1] In the *Annual* for 1904-05 I published two Tamil inscriptions of Parāntaka's reign found at Uttaramallūr in the Chingleput district. They register rules made at the instance of the king for the proper management of village committees. The qualifications for membership on these committees are laid down and the mode of selection of members is described at considerable length. These two records prove that Parāntaka I., engrossed as he must have been in the wars against the Pāṇḍyas,[2] was not unmindful of problems relating to local administration in his dominions. In the same article I remarked that he utilised all the booty of his wars in covering with gold the Śiva temple at Cidambaram in the South Arcot district. This is confirmed by the newly discovered Tiruvālaṅgāḍu grant which reports that he covered with gold the small hall (*dabhrasabhā*) of Śiva (at Cidambaram).[3] He performed the *hēmagarbha*, and *tulābhāra* gifts, made grants of land to brāhmaṇas and built temples.[4]

That the three great Śaiva saints of the Tamil country and their hymns known as the *Dēvāram*, which forms part of the scriptures of the Tamil Śaivas, were not forgotten in the time of Parāntaka I. is evident from an inscription of his forty-first year found in the Paśupatīśvara temple at Allūr in the Trichinopoly district.[5] Provision is here made for the singing of the *Tiruppadiyam* hymns (every day). This reference to the *Dēvāram* is important, because during the time of Nambi Āṇḍār Nambi,[6] at some later period, the hymns were all either lost or forgotten and only a single copy was procured with difficulty in the Cidambaram temple.

As pointed out by me in the *Annual* for 1904-05, the original name of Parāntaka I. was Parakēsarīvarman, to which the epithet *Madiraikoṇḍa* 'who conquered Madura' was subsequently added. After defeating the Singhalese troops sent to help the Pāṇḍya king, Parāntaka assumed the title Saṁgrāmarāghava[7], *i.e.* a veritable Rāma in battle. His other surnames were :—Vīranārāyaṇa,[8] Parāntaka[9] and Vīra-Cōḷa.[10] From the two Uttaramallūr inscriptions mentioned above we learn that he also bore the following birudas :[11] *Dēvēndraṉ*[12] 'the lord of gods' ; *Cakravartin*

[1] This is implied by the boast of the Rāṣṭrakūṭa king Kṛṣṇa III. to have captured both Kāñci and Tanjore ; *Ep. Ind.*, Vol. III, pp. 284 and 285.

[2] Parāntaka seems to have fought against the Pāṇḍyas at least on three distinct occasions ; see p. 179, note 10.

[3] *Annual Report* on Epigraphy for 1905-06, Part II, para. 16. The Sanskṛt *dabhrasabhā* is evidently a translation of the Tamil *Śiṟṟambalam* or *Tiruccіṟṟambalam*, the name of the temple at Cidambaram.

[4] *South-Ind. Inscrs.*, Vol. II, p. 386, verse 7. The *hēmagarbha* and *tulābhāra* gifts are even to this day performed by the rulers of Travancore soon after their accession.

[5] No. 373 of the Government Epigraphist's collection for 1903. In an inscription of the 17th year of the Gaṅga-Pallava king Vijaya-Nandivikramavarman from Tiruvallam in the North Arcot district, provision is made for the singing of the *Tiruppadiyam* hymns (*South-Ind. Inscrs.*, Vol. III, p. 93).

[6] The time of this author is not yet settled. It has been said that he was a contemporary of the Cōḷa king Rājarāja I. (A.D. 915 to at least 1063). There are, however, serious difficulties in accepting this date for the author. In all probability he belonged to a later period.

[7] *South-Ind. Inscrs.*, Vol. II, p. 387. This title is known only from the Udayēndiram grant and does not occur anywhere else.

[8] *Ibid.*, p. 386. The village of Vīranārāyaṇa-caturvēdimaṅgalam mentioned frequently in the Tanjore inscriptions was evidently called after Parāntaka I.

[9] The village Śrī-Parāntaka-caturvedimangalam frequently referred to in the Tanjore inscriptions was probably called after Parāntaka I. Parāntaka was also one of the birudas of the Pāṇḍya king Neḍuñjaḍaiyaṉ ; *Ind. Ant.*, Vol. XXII, p. 71.

[10] This surname occurs in the subjoined Grāmam inscription ; see p. 184, below. The Western Gaṅga Pṛthivīpati II. was evidently called Vīra-Cōḷa after his overlord Parāntaka I.

[11] See the *Annual Report* on Epigraphy for 1898-99, paragraph 59.

[12] It is difficult to say how the Cōḷa king came to assume this surname. His victory over the Pāṇḍyas, who claim to have overcome Indra, is a far-fetched justification of the *biruda*.

'the emperor'; '*Paṇḍitavatsalaṉ*[1] 'fond of learned men'; '*Kuñjaramallaṉ*[2] 'the wrestler with elephants'; '*Śūraśūlāmaṇi* 'the crest-jewel of heroes.' He is also said to have resembled the celestial tree in his gifts. The large Leyden plates[3] and the Tiruvālaṅgāḍu grant[4] mention three sons of Parāntaka I., *viz.* Rājāditya, about whom more will be said in the sequel; Gaṇḍarāditya, who figures as the author of one of the hymns[5] in the Tamiḻ *Tiruviśaippā*;[6] and Arimjaya. Gaṇḍarāditya is mentioned in an inscription from Uyyakkoṇḍāṉ-Tirumalai[7] and a village called Gaṇḍarāditya-caturvēdimaṅgalam after him is mentioned in the Tanjore inscriptions.[8] Ariñjigai-carturvēdimaṅgalam, which seems to have been another name of Naṅgavaram[9] in the Trichinopoly district, appears to have been called after the third son of Parāntaka and the temple of Ariñjīśvara built by Rājarāja I. at Mēlpāḍi in the North Arcot district[10] might also owe its name to him. Besides these three sons, mention is made of three others who may or may not be identical with them. These were:—(1) Kōdaṇḍarāma, after whom the temple at Toṇḍamanāḍ near Kāḷahasti appears to have been called Kōdaṇḍarāmēśvara,[11] (2) Parāntakaṉ Arikulakēsarin (mentioned in an inscription at Tiruppūndurutti in the Tanjore district and in another at Tirukkōvalūr in the South Arcot district)[12], after whom a temple at Niyamam was called Arikulakēsari-Īśvara[13] and (3) Parāntakaṉ Uttamaśīli,[14] who gave his name to Uttamaśīli-caturvēdimaṅgalam in Viḷā-nāḍu.[15] In case these three are different from those mentioned above, the former must have died before their father and consequently did not succeed to the throne.

From the foregoing it will be evident that the reign of Parāntaka I. is an important landmark in the history of Southern India and of the Cōḷas in particular. We may now look backwards and see what scraps of information we can glean

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[1] This surname is applied to the Pāṇḍya king Neduñjaḍaiyaṉ in the Madras Museum plates; *Ind. Ant.* Vol. XXII, p. 71, text-line 50.

[2] This is synonymous with *Hastimalla*, a title borne by the Western Gaṅga king Pṛthivīpati II, who must have borrowed it from his Cōḷa overlord.

[3] *South-Ind. Inscrs.*, Vol. I, p. 112, and Vol. III, p. 196.

[4] *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 16.

[5] *Ep. Ind.*, Vol. III, p. 280 f. It is not altogether impossible that the composer of this hymn was Madurāntakaṉ Gaṇḍarādittar mentioned in some of the inscriptions of Rājarāja I. This Gaṇḍarādittar was probably the son of Madhurāntaka, who preceded Rājarāja I. on the Cōḷa throne. Almost nothing is known of the first Gaṇḍarāditya. But the second seems to have been of a religious turn of mind. He overhauled the accounts of the Tiruvallam temple in the 7th year of Rājarāja I (*South-Ind. Inscrs.*, Vol. III, p. 102 f.) and set up an image in the Paraśurāmēśvara temple at Guḍimallam near Kāḷahasti (No. 222 of 1903).

[6] This is a collection of hymns included in the scriptures of the Tamil Śaivas.

[7] *South-Ind. Inscrs.*. Vol. II, p. 375. In the *Annual Report* on Epigraphy for 1903-04, paragraph 20, I tentatively assigned to his reign two inscriptions from Tiruvāmāttūr in the South Arcot district (Nos. 425 and 426 of 1903).

[8] *Ibid.*, p. 374.

[9] Nos. 334, 342 and 345 of the Government Epigraphist's Collection for 1903. Two villages named Ariñjigai-caturvēdimaṅgalam are mentioned in the Tanjore inscriptions, one in Iḍaiyaḷa-nāḍu, a subdivision of Arumoḻidēva-vaḷanāḍu (*South-Ind. Inscrs.*, Vol. II, p. 103) and the other in Uraiyūr-kūṟṟum, a subdivision of Kēraḷāntaka-vaḷanāḍu (*ibid.* pp. 228 and 326). The latter must be identical with Naṅgavaram.

[10] *South Ind. Inscrs.*, Vol. III, p. 28.

[11] *Annual Report* on Epigraphy for 1904-05, Part II, paragraph 9.

[12] He is also mentioned in No. 25 of 1895 from Tillasthānam in the Tanjore district. Professor Hultzsch identifies him with Arimjaya; *Ep. Ind.*, Vol. VII, p. 141.

[13] *South-Ind. Inscrs.*, Vol. II, pp. 281, 287, 295 and 296. A tailor who bore the title Arikulakēsari-Śākkai is also mentioned in one of the Tanjore inscriptions; *ibid.*, p. 303.

[14] No. 19 of 1895 from Kaṇḍiyūr in the Tanjore district.

[15] *South-Ind. Inscrs.*, Vol. II, p. 229, paragraph 7.

about the early history of the dynasty which held sway for more than two centuries over Southern India and the monuments of whose rule—both documentary and artistic—bear ample testimony to its extent.

Parāntaka's father Āditya conquered the Gaṅga-Pallava king Aparājita and annexed his dominions about the end of the ninth century A.D. His grandfather Vijayālaya is reported to have captured Tañcāpurī (Tanjore), founded a temple of Durgā (Niśumbhasūdanī) in the town and ruled the earth through her blessing.[1] If this be true, Tanjore did not belong to Vijayālaya originally, but was acquired by conquest.[2] Where the Cōlas were and what their capital was prior to the time of Vijayālaya are questions which naturally suggest themselves. On these points none of the available authorities furnishes any definite and reliable information.

The Cōlas are mentioned in the Aśōka edicts belonging to the third century B.C., while Vijayālaya founded his dynasty in the second half of the ninth century A.D. The history of the Cōlas during this long interval of twelve centuries is very little known at present. Vijayālaya is said in the large Leyden plates[3] as well as in the Tiruvālaṅgāḍu[4] and Udayēndiram[5] grants to have been born in the lineage of Karikāla, Kōkkiḷḷi and Kōcceṅgaṇṇāṇ. These three names are found also in Tamiḻ literature,[6] from which those of a number of other Cōla kings may also be derived.[7] The way in which these three names are mentioned in the copper-plate grants suggests that the kings must have flourished long before Vijayālaya. As regards Karikāla, a tentative date for him may be obtained as follows:—He is referred to as the ancestor of the Cōḷas mentioned in the next paragraph, who, in the seventh and eighth centuries A.D., seem to have been in possession of a kingdom in the Telugu country.[8] In inscriptions of the twelfth and thirteenth centuries found in the Guntur and Nellore districts the ancestry of the Telugu-Cōḍas is traced to Karikāla, who got Trilōcana and other kings of the earth to build the banks of the river Kāvērī.[9] This reference to the building of the banks of the Kāvērī proves the identity of this Karikāla with the ancient Cōḷa king mentioned in Tamiḻ literature.[10] By Trilōcana is evidently meant the mythical Pallava king Trilōcana-Pallava.[11] Thus there was a tradition in the twelfth century A.D. that Karikāla and Trilōcana-Pallava were contemporaries. Another tradition preserved in Eastern Calukya copper-plate grants of the eleventh century is that a certain Vijayāditya, who preceded Kubja-Viṣṇuvardhana (A.D. 615 to 633) by five

[1] *Annual Report* on Epigraphy for 1905-06, paragraph 16.

[2] In the sequel it will be pointed out that the town was probably captured from the Pāṇḍyas.

[3] *Archæological Survey of Southern India*, Vol. IV, p. 206, text-lines 24 to 28.

[4] *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 15.

[5] *South-Ind. Inscrs.*, Vol II, p. 386, verse 4.

[6] *Ibid.*, pp. 377-79.

[7] The Tamil anthology *Puṟanāṉūṟu*, for instance, furnishes the names of a number of Cōla kings. It is extremely doubtful if we shall ever be in a position to fix definitely the period when they flourished, much less make out a connected history of their reigns. No doubt we have literary documents assigned— by whom and when we do not know—to the reigns of *these Cōḷa kings*. But the evidence furnished by these documents and the tradition connecting them with particular Cōla kings have to be received with caution.

[8] *Annual Report* on Epigraphy for 1904-05, Part II, paragraphs 5 and 6.

[9] *Annual Report* on Epigraphy for 1899-1900, paragraph 45.

[10] *South-Ind. Inscrs.*, Vol. II, p. 377.

[11] The Tiruvālaṅgāḍu grant implies that Kāñci was included in the dominions of Karikāla, who is said to have beautified the city; *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 15. Perhaps the city came into the possession of Karikāla after his subjugation of Trilōcana-Pallava.

generations, conquered Trilocana-Pallava.[1] Allowing the usual twenty years for each generation, we get roughly the end of the fifth century A.D. as the approximate period of Vijayāditya and of his contemporary Trilocana-Pallava. The same may be accepted as the provisional date[2] of the Cōla king Karikāla.[3]

The epigraphical monuments of Southern India do not carry us beyond the period of Pallava supremacy, and consequently our retrospect of Cōla history has to be restricted to that period. The Chinese pilgrim Hiuen Tsiang, who visited Kāñcī about A.D. 640,[4] refers to a kingdom called Chu-li-ye, which sounds very much like Cōla and has consequently been identified with it. Chu-li-ye was south-west of Dhānyakaṭaka, the old name of Amarāvatī in the Guntur district. "Going from Chu-li-ye south, we enter into a wild forest tract, and passing 1,500 or 1,600 *li*, we come to the country of Ta-lo-pi-cha" (Drāviḍa). This description of Chu-li-ye takes us to the Kurnool district for its location.[5] In the northern portion of the Cuddappah district adjoining the Kurnool frontier have been found records of certain Cōḷa kings who claimed to be descended from Karikāla. They also belonged to the solar race and the Kāśyapa *gōtra*.[6] In his volume of Tumkūr inscriptions Mr. Rice refers to certain Cōḷa epigraphs from the country round Hēmavatī (in the Anantapur district) and Niḍugal and assigns them to the middle of the eighth century A. D.[7] It has therefore to be concluded that more than a century before the Cōḷas of the Tamiḻ country became dominant in Southern India, there was a Cōḷa kingdom comprising perhaps the southern portion of the Kurnool district, the northern part of Cuddappah and the south-west of the Anantapur district bordering on the Mysore State.[8] But these Cōḷas of the Telugu country do not, so far, appear to have played any important part in the ancient history of the country.

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[1] The earliest inscription referring to this tradition belongs to the reign of Vimalāditya, who ascended the throne in A. D. 1011; *Ep. Ind.*, Vol. VI, p. 352, text-line 16f.

[2] The reference to the Ceylon king Gajabāhu I. in the Tamiḻ poem *Śilappadigāram* has been utilised to fix the date of the Cōḷa king Karikāla. According to the Singhalese chronicle *Mahāvaṁsa*, Gajabāhu I. reigned from A.D. 113 to 135. That the chronology of the *Mahāvaṁsa* is not beyond question has been frequently pointed out; see also Dr. Hultzsch's remarks in *South-Ind. Inscrs.*, Vol. II, p. 378.

[3] According to Tamiḻ literature there was a Pallava king ruling at Kāñcī as a contemporary of Karikāla. The poet Rudraṅgaṇṇaṉār, who is said to have received presents from the latter, is the author of two poems, one in honour of Karikāla himself. The other gives an account of the Toṇḍaimāṉ Iḷandiraiyaṉ of Kāñcī. Kōkkiḷḷi was perhaps anterior to Karikāla, because the Tamiḻ poem *Kaliṅgattu-Paraṇi*, implies that the former wedded a Nāga princess. To his son by this princess was subsequently assigned Toṇḍai-nāḍu. There is an allusion to this story in the second of the two abovementioned poems.

[4] Mr. V. A. Smith's *Early History of India*, second edition, p. 426.

[5] This point was first noticed by me in 1893 in the *Madras Christian College Magazine*, Vol. XI, p. 284, note. Mr. Smith independently arrived at the same result subsequently; see his *Early History of India*, p. 417.

[6] *Annual Report* on Epigraphy for 1904-05, Part II, paragraphs 5 and 6.

[7] *Epigraphia Carnatica*, Vol. XII, p. (7). These are all short epitaphs and no reference is made in them either to Karikāla or to the solar race. Six of them (Mi. 92, 93, 94, 97, 100 and 101) mention Cōḷa-Dhanañjaya, while Dhanaṁjayavarman figures among the ancestors of Pōrmukharāma Puṇyakumāra in the short pedigree of the Cōḷas published by me in the *Annual Report* on Epigraphy for 1904-05, Part II, paragraph 5.

[8] In the twelfth and thirteenth centuries A. D. there were several local families in the Telugu country claiming descent from the Cōḷa king Karikāla, whose victory over Trilōcana and construction of the banks of the Kāveri are in most cases referred to. Perhaps the Cōḷa dominions comprised during the time of Karikāla a considerable portion of the modern Telugu country. The conquests of the Early Calukya Pulikēśin II, and the foundation of the province of Vēṅgī must have driven the Pallavas to retire further south and to establish themselves in the country which subsequently came to be called Toṇḍai-nāḍu. Either on this occasion or on an earlier period of Pallava aggression the Cōḷas were probably broken up. One portion of their dominions seems to have been consituated into a small principality in the Telugu country and what lay to the south of Toṇḍai-nāḍu or at least the greater part of it became another small kingdom with Uṟaiyūr near Trichinopoly for its capital.

It is, however, with the Cōlas of the Tamil country and their history prior to the time of Vijayālaya that we are at present directly concerned. No epigraphical or architectural monuments of this period have so far been discovered which may be attributed to them. We are consequently obliged to determine the position occupied by them from documents belonging to other dynasties.[1] The Pallava king Siṁhaviṣṇu, father of Mahēndravarman I., claims to have vanquished the Cōla king along with the Malaya, Pāṇḍya and Siṁhala rulers.[2] The great power (*vibhūti*) of the Cōlas is referred to in one of the Trichinopoly cave inscriptions[3] of Mahēndravarman I., while in another[4] the Trichinopoly rock is said to resemble the "diadem of the Cōla province." From these two references it appears that the Cōlas could not have become actually subordinate to the Pallavas. Later Pallava kings frequently boast of having conquered the Cōlas.[5]

From the Tamil *Periyapurāṇam*, which is a collection of the religious biographies of the sixty-three Tamil Śaiva saints, we get a few glimpses of Cōla history which we cannot afford to despise. The exact date of the composition of this book has not been satisfactorily settled.[6] There is, however, not much doubt that the author, who was a Cōla minister, had a historical turn of mind and based his book on authentic tradition. This aspect of the *Periyapurāṇam* has been proved in several instances,[7] and consequently it may be looked upon as a safe guide to the student of South Indian historical research. We learn from it that the Pāṇḍya king Neḍumāṛaṇ, who lived in the seventh century A.D. married a Cōla princess.[8] One of the sixty-three devotees was Pugaḷccōḷa-Nāyaṇār,[9] a Cōla king who had his capital at Uṛaiyūr near Trichinopoly and who fought against an enemy named Adigaṇ in Koṅgu. Pugaḷchchōla is said to have been in hereditary possession of Karuvūr in the Coimbatore district. Another Cōla king among the Śaiva devotees was Iḍaṅgaḷi-Nāyaṇār, who had his capital at Koḍumbāḷūr in Kōṇāḍu.[10] A third was Kūṛṛuva-Nāyaṇār,[11] who was

[1] In the inscriptions of the Andhra king Siri Satakani Gotamiputa (A.D. 113-138), who boasts of extensive conquests (see *e.g. Ep. Ind.*, Vol. VIII. p. 61), the Cōḷa kingdom is conspicuous by its omission. There is no mention of it either in the Allahabad pillar of Samudragupta, which refers only to Viṣṇugōpa of Kāñcī. The earliest epigraphical reference to the southern kingdoms subsequent to the time of Aśōka is in the Mahākūṭa pillar of the Calukya king Maṅgalēśa (A.D. 597-8 to 608). The Pallavas seem to have been dominant in Southern India—at least about the middle of the fourth century A.D., during the reign of Samudragupta. Latterly the Kadambas grew powerful. But the sphere of their influence was probably limited to the west coast.

[2] *South-Ind. Inscrs.*, Vol. II, p. 356.

[3] *Ibid.*, Vol. I, p. 30, verse 3.

[4] *Ibid.*, verse 3 of the first inscription.

[5] Narasiṁhavarman I., son of Mahēndravarman I., claims to have "repeatedly defeated the Cōḷas, Kēraḷas, Kaḷabhras and Pāṇḍyas;" *South-Ind. Inscrs.*, Vol. I, p. 152.

[6] The patron of the author was a Cōḷa king named Anapāya. But the latter has not yet been satisfactorily identified with any of the kings known from inscriptions. It is often assumed that he must be identical with Kulōttuṅga I. (A.D. 1070 to 1118). But the name Anapāya occurs in a Tiruvārūr inscription of Rājakēsarivarman Kulōttuṅga, who, to judge from the alphabet, must have been later than Vikrama-Cōḷa.

[7] See *e.g. South-Ind. Inscrs.*, Vol. II, pp. 134, 152-54, 167 and 172.

[8] He was converted to the Śaiva faith by the great Tiruñānasambandar; *Ep. Ind.*, Vol. III, p. 278, and *Ind. Ant.*, Vol. XXII, p. 63.

[9] *Periyapurāṇam* (1870), chapter ii, p. 356; see also *Ind. Ant.*, Vol. XXII, p. 66. The king is said to have been an ancestor of Anapāya, the patron of the author of the *Periyapurāṇam*.

[10] *Periyapurāṇam*, chapter ii, p. 381. Kōṇāḍu appears to have formed part of the modern Pudukkōṭṭai State. Nārttāmalai which now belongs to that State, was, in ancient times, a city in Kōṇāḍu; *Annual Report* on Epigraphy for 1904-5, p. 14, No. 362 of 1904. Koḍumbāḷūr in Uṛatt[ū]r-kūṛṛam, a sub-division of Kōṇāḍu, is mentioned in No. 345 of 1902, dated during the reign of Parāntaka I.

[11] *Periyapurāṇam*, chapter ii, p. 354.

originally a petty chief of Kalandai, but subsequently became powerful, defeated his enemies and annexed their dominions. Eventually he claimed the Cōḷa crown and called on the brāhmaṇas at Cidambaram[1] to perform the coronation ceremony. But the latter declared they would not acknowledge any but a Cōḷa prince and left in a body for the Cēra country. Ēyarkōṇ-Kalikkāma-Nāyaṇār,[2] a fourth devotee, is said to have been the hereditary general of Cōḷa kings Of these five devotees, the first and the last lived probably during the Pallava period and the other three, whose dates are not known, might have flourished about the same time.[3] If this surmise prove correct, we get the names of two Cōḷa kings and a usurper who belonged to the period. According to the Vaiṣṇava *Guruparamparāprabhāva*, Tirumaṅgai-Aḷvār whom I have tentatively assigned to the eighth century A.D.,[4] was a feudatory and general of an unnamed Cōḷa king.

Intermarriages between the Cōḷas and Pāṇḍyas seem to have been frequent during the period under review. One of them has already been mentioned, *viz.*, that between the Pāṇḍya Neḍumāraṉ and a Cōḷa princess. Two more are known, one from the *Periyapurāṇam*,[5] which reports that a Cōḷa king had married a Pāṇḍya princess and was living at Madura when the great devotee Sundaramūrti-Nāyaṇār[6] went there with the Cēra king. The third intermarriage is implied by the Trichinopoly cave inscription of Varaguṇa-Pāṇḍya. In this case it was probably a Cōḷa princess that married a Pāṇḍya king.[7] In fact Varaguṇa-Pāṇḍya, who ascended the throne in A.D. 862-63,[8] appears to have been the son of a Pāṇḍya king by a Cōḷa princess.

Another important feature of this period is that the Pāṇḍyas were dominant in the Tamiḻ country during a considerable portion of it. The Pallava general Udayacandra claims to have defeated the Pāṇḍya army at the battle of Maṇṇaikuḍi about the middle of the eighth century A.D.[9] If this be true, either the Pallava or the Pāṇḍya must have encroached upon Cōḷa territory, which lay between the dominions of the two contending parties. The Cōḷas might also have been allied with either the Pallavas or the Pāṇḍyas in the battle. Some time before the reign of Varaguṇa, the Pāṇḍyas appear to have conquered the Cōḷas and occupied their dominions. This fact is testified to by the pillar inscriptions at Śendalai in the Tanjore district, [10] which record the conquests of a Pāṇḍya king named Perumbiḍugu

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[1] Cidambaram in the South Arcot district was the stronghold of the Śaiva creed in ancient times. The brāhmaṇas of the place appear to have enjoyed the privilege of placing the crown on the king's head at the time of his coronation.

[2] *Periyapurāṇam*, chapter ii, p. 232. He was a contemporary of Sundaramūrti-Nāyaṇār, who flourished in the 8th or 9th century A.D.

[3] They are all mentioned by the devotee Sundaramūrti-Nāyaṇār referred to in the preceding footnote.

[4] *Ep. Ind.*, Vol. VIII, p. 294.

[5] Chapter ii, p. 339, verse 92.

[6] *Annual* for 1903-04, p. 274.

[7] *Ibid.* p. 272.

[8] *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 25; see also my *Annual Report* for 1906-7, Part II, paragraph 21.

[9] *South-Ind. Inscrs.*, Vol. II, p. 372. Maṇṇaikuḍi has not yet been identified. But a village of the same name is mentioned in No. 342 of 1904 from Kuḍumiyāmalai in the Pudukkōṭṭai State.

[10] In the *Annual* for 1903-04, p. 274, I remarked: "It may be supposed, at least tentatively, that Suvaraṇ Māraṇ (the Pāṇḍya king to whose time the Śendalai pillar belongs) was a predecessor of Varaguṇa." Later on in this paper it will be pointed out that, in all probability, the former reigned before the latter.

Muttaraiyaṉ[1] and the construction by him of a Piḍāri temple at Niyamam[2] not far from Śendalai. Just before Vijayālaya established the Cōla dynasty, the Pāṇḍya king Varaguṇa seems to have been in possession of the Cōla capital Uṟaiyūr and apparently also of a considerable part of the ancient Cōla dominions.[3] His ancestor Varaguṇa Mahārāja extended his military operations as far north as Araiśūr in the South Arcot district.[4] If the conquest and occupation of the Cōla country did not take place during the reign of Varaguṇa, the event must have happened in the time of one of his predecessors. In the *Annual* for 1903-04, p. 273, I stated that Varaguṇa also undertook an invasion against Ceylon and carried away a large amount of booty from the island. If the date A.D. 846-66 given in the *Mahāvaṁsa* for the Pāṇḍya invasion be correct, it must have taken place during the reign of Varaguṇa's father Parac̣akrakōlāhala, who, in the larger Siṉṉamaṉūr places, claims to have waged war against Ceylon.[5]

With the powerful Pallavas on the north and the strong Pāṇḍyas in the south, the Cōlas, who were hemmed in between the two, had evidently to be satisfied with a comparatively insignificant position,[6] and the influence which they could exert on the momentous events taking place around them was thus very small. Like the Western Calukyas during the period of Rāṣṭrakūṭa supremacy, the Eastern Calukyas during the period of interregnum between A.D. 972 and 999[7] and the Pāṇḍyas at the time of Cōḷa supremacy, the Cōlas at the time of which we are now speaking probably did nothing worthy of permanent record and were apparently not in a position to erect any monuments, that could survive the effects of time. The Cōla capital was probably Uṟaiyūr during all this period and the tract of country subject to them must have been very small. The intermarriages with the dominant Pāṇḍyas make it likely that the Cōlas occasionally made common cause with them[8] against the Pallavas who must have been looked upon as intruders. As a matter of fact such a coalition was effected among the Tamiḻ princes (*Dramiḻa-narapati*) against the Pallava king Nandivarman

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[1] The Tamiḻ anthology entitled *Nālaḍiyār* contains two verses which refer to a certain Perumuttaraiyar as a famous donor. The late Rev. Dr. Pope has added the following note on the name:—"The precise meaning is doubtful. It may be *muttar* + *aiyar* 'venerable ascetics,' who have obtained *mutti*. Again, it may be 'lords of the three lands,' *i.e.*, Pāṇḍinādu, Śōḻanāḍu and Śēranāḍu." I think it is not impossible that the reference here is to the Pāṇḍya king Perumbiḍugu Muttaraiyaṉ, whose name might have been abbreviated into Perumuttaraiyar. Tradition has it that the Jaina ascetics who composed the verses of the *Nālaḍiyār*, sought refuge in the Pāṇḍya country during a famine. It seems natural that they should refer to the Pāṇḍya king as a famous donor. If this conjecture of mine prove correct, it would give us the approximate date of composition of the *Nālaḍyiār*, said to belong to the period of the last Madura *saṅgam*.

[2] One of the vestiges of Pāṇḍya domination in the country round Niyaman is the village of Paḻamāṉēri, which is called Paḻa-Māṟaṉēri, 'the old tank or village of the Pāṇḍya' in one of the Tanjore inscriptions.

[3] *Annual* for 1903-04. p. 272.

[4] *Annual Report* on Epigraphy for 1904-05, Part II, paragraph 22; see also paragraph 21 of Part II of the *Annual Report*, 1906-07.

[5] *Annual Report* on Epigraphy for 1906-07, Part II, paragraph 23.

[6] The Pāṇḍya king Neḍuñjaḍaiyan, who probably flourished during the period of Cōla decline calls himself the Sembiyaṉ *i. e.*, Cōḻa king; *Ind. Ant.*, Vol. XXII, p. 73. It looks as if the Cōḻas had almost ceased to exist.

[7] *Ep. Ind.*, Vol. VI, p. 349.

[8] The part which the Kēraḻas played during this period cannot be ascertained, because our knowledge of their history is much more scanty than that of the Cōḻas. The geographical isolation which they enjoyed to some extent might not have necessitated any action on their part. On one occasion they appear to have combined with the Pallavas to help the king of Koṅgu against the aggressive Pāṇḍya Neḍuñjaḍaiyaṉ; *Ind. Ant.*, Vol. XXII, p. 73.

Pallavamalla, who was besieged by them at a place called Nandipura.[1] The Pāṇḍya king Neḍuñjaḍaiyaṉ claims in the Madras Museum plates to have destroyed the Pallava in battle.[2]

The battle of Śrīpuṟambiya, whose importance in the history of Southern India is gradually becoming apparent,[3] seems to have dealt the death-blow to Pāṇḍya supremacy and at the same time weakened the power of the Gaṅga-Pallavas. Internal dissensions, the bane of all Indian kingdoms, set in in the Pāṇḍya country already during the reign of Varaguṇa's father, if we are to believe the large Śiṉṉamaṉūr plates. The latter is said to have conquered a prince named Māyā-Pāṇḍya.[4] The *Mahāvaṁsa*[5] tells us that a Pāṇḍya prince dissatisfied with the treatment accorded to him by his sovereign made up his mind to overthrow the kingdom and, accordingly, sought help from Ceylon. The Singhalese king, who was eagerly looking for an opportunity to be avenged on the Paṇḍyas for their invasion, gladly availed himself of the opportunity and despatched an army against Southern India. The town of Madura was captured and the Pāṇḍya king defeated. The country was eventually made over to the prince who was allied with the king of Ceylon. This invasion took place during the reign of Sena II. (A.D. 866 to 901).

The Cōlas could not have been slow to take advantage of the weakness of the Pāṇḍyas. Accordingly, as stated at the beginning of this article, Vijayālaya, the founder of the revived Cōla dynasty, captured Tanjore[6] and probably secured with it his hereditary dominions, the greater portion of which must have fallen into the hands of the Pāṇḍyas.[7] Vijayālaya's successor Āditya I. improved upon this position by removing the other enemy of Cōla expansion[8] *viz.* the Gaṅga-Pallavas and annexing their dominions.[9] Thus within two generations both the Pāṇḍyas and the Gaṅga-Pallavas lost their power and their place was naturally taken by the rising Cōlas. Parāntaka I., the son of Āditya I., had to keep down both of the enemies of Cōla expansion. The Pāṇḍyas had not been conquered by the Cōlas, but lost their power owing to their defeat in the battle of Śrīpuṟambiya and owing to internal dissensions, as I have already explained. Besides this, the Singhalese could be summoned at any moment to help the Pāṇḍyas. Parāntaka was constantly at war with them[10] and thus apparently prevented them from rising into power again. The Gaṅga-Pallava king had actually been vanquished in battle and his dominions annexed. Consequently they had to be treated differently.

[1] *South-Ind. Inscrs.*, Vol. II, p. 372. Nandipura has not been identified. The Vaiṣṇava saint Tirumaṅgai Āḻvār has composed a hymn (*Periyatirumoḻi*, verses 491 to 500) in honour of a Viṣṇu temple called Nandipura-Viṇṇagar, which has probably to be looked for in the Cōḻa country.

[2] *Ind. Ant.*, Vol. XXII, p. 72.

[3] This battle (called the great battle of Śrīpuṟambiya), it will be remembered, was fought between the Pāṇḍya king Varaguṇa and the Gaṅga-Pallava king Aparājita. The former was defeated. But the Western Gaṅga king Pṛthivīpati I., who was an ally of the latter, lost his life in the battle. To the victorious Aparājita the loss of his ally must have been a serious one. The battle is mentioned in the Udayēndinam grant of Hastimalla; *South-Ind. Inscrs.*, Vol. II, p. 387, verse 18. See also my *Annual Report* on Epigraphy for 1905-06, Part II, paragraphs 8 to 10. It was apparently this battle that paved the way for Cōḻa supremacy in Southern India.

[4] See my *Annual Report* for 1906-07, p. 66.

[5] L. C. Wijesinha's *Translation*, Chapter LI.

[6] *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 16.

[7] As I have already remarked, it was probably from the Pāṇḍyas that Vijayālaya captured Tanjore.

[8] The place at which the decisive battle between the Gaṅga-Pallavas and the Cōḻas took place is not known. But in all probability this event happened subsequent to the battle of Śrīpuṟambiya.

[9] *Annual Report* on Epigraphy for 1905-06, Part II, paragraph 10.

[10] There is reason to suppose that he fought against the Pāṇḍyas at least on three distinct occasions; see my *Annual Report* for 1906-07, paragraphs 32 to 34.

It was enough if they were carefully watched. As will be pointed out below, the heir-apparent to the Cōḷa throne was probably entrusted with this duty.

Apart from the date discussed at the commencement of this paper the contents of the subjoined inscription are also important and I have accordingly decided to publish the text of the whole record and a translation of it. The Sanskṛt portion of the epigraph consists of three verses in three different metres which report that Veḷḷaṅkumāra (l. 7.) or Kumāra (ll. 11 and 14), a native of Puttūr (l. 1) or Navāgrahāra[1] (l. 11) in Kērala (l. 2,), the general (*camūnāyaka*) of prince Rājāditya (l. 3), the son of Madhurānta (l.4) built at Mauligrāma[2] (l. 4) in the country on the banks of the Peṇṇā river (l. 5) a stone temple of Śiva (ll. 5 and 9). The Tamiḻ portion which follows the date repeats this fact,—the village being here called Tirumuḍiyūr (l. 20),—and reports that, on the specified day, *viz.*, 14th January A.D. 943, the image of the god Āṟṟuttaḷi-Perumāṉaḍigaḷ (ll. 20 f. and 26 f.) was set up in the temple. The king's name Śrī-Parāntakadēva *alias* Śrī-Vīrasōḻa-Perumāṉaḍigaḷ (l. 32 f.) occurs and Veḷḷaṅgumaraṉ (l. 36 f.) is said to have been a native of Nandikkarai-Puttūr, *i.e.*, Puttūr on the bank of the river Nandi in Malai-nāḍu (l. 35 f.). He is here called the great general (*perumbaḍaināyakar*)[3] of prince Rājāditya and the first servant (*mūlabhṛtya*) of the Cōḷas (l. 31 f.).

In the first place, it is necessary to remark that the temple was not founded on the 14th January A.D. 943. Very probably it existed prior to the Cōḷa period in some form or other and was only repaired or rebuilt by the Cōḷa general. At any rate the temple existed already in the twenty-third year of Parāntaka's reign[4] corresponding to A.D. 929-30; and in the twenty-ninth year[5] (=A.D. 935-6) Veḷḷaṅgumaraṉ made an endowment for burning a perpetual lamp in the same temple. In the inscription which furnishes this information, the temple is called Śrī-Mūlasthānattu-Mahādēva of the Śrī-Āṟṟuttaḷi (temple) at Tirumuḍiyūr. Similarly, the Bhaktajanēśvara temple at Tirunāmanallūr, which is not very far off from Grāmam, was repaired or rebuilt during the reign of Parāntaka I. and was called Rājādityēśvara.[6] In this case, we know that the temple existed already during the time of Sundaramūrti-Nāyaṉār, who, as I have already mentioned more than once, flourished probably in the 8th or 9th century A.D. The name of the temple[7] was also altered, evidently because it was rebuilt either by Rājāditya himself or by his mother.[8]

The fact that Veḷḷaṅkumāra or Veḷḷaṅgumaraṉ is styled the general of Rājāditya implies that the latter had an independent army. His retinue (*parivāra*) is referred

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[1] Navāgrahāra is the Sanskṛt translation of the Tamiḻ name Puttūr.

[2] This is the Sanskṛt form of the Tamiḻ name Muḍiyūr mentioned later on.

[3] In No. 739 of 1905, Veḷḷaṅgumaraṉ is similarly described.

[4] No. 744 of the Government Epigraphist's collection for 1905.

[5] No. 739 of the same collection.

[6] *Ep. Ind.*, Vol. VII, p. 133.

[7] Inscriptions dated during the 20th year of Parāntaka I. (A.D. 926-27) do not mention the name Rājādityēśvara (Nos. 378 and 380 of 1902). We may, therefore, suppose that the rebuilding was later than that year. It must have been completed in or before the 28th year (*Ep. Ind.*, Vol. VII, p. 133). The name Rajādityēśvara does not occur in records of the 37th year (No. 339 of 1902) and 39th year (Nos. 351 and 307 of 1902). In later epigraphs the temple is called by its original name Tiruttoṇḍiśvara. It is thus evident that the new name Rājādityēśvara was maintained only for a few years.

[8] It is not quite certain whether Rājāditya built the temple or his mother. The passage which refers incidentally to this fact runs as follows:—*Tiruttoṇḍiśvara[n-] dirukkaṟṟaḷi se[y*]vitta Rājādittadēvar tāyār nam-birāṭṭiyār Kōkkiḻāṉaḍigaḷ parivārattāḷ etc.* (*Ep. Ind.*, Vol. VII, p. 133). It seems to me that the name Rājādityēśvara is not quite conclusive on the point. Even if his mother had caused the temple to be built, she might have preferred to call it after her son. In other inscriptions of the same temple, Rājāditya has only the epithet *piḷḷaiyāir*.

to in several of the Tirunāmanallūr inscriptions.[1] His cavalry (No. 327 of 1902) and elephant troops (No. 330 of 1902) are also mentioned. It may, therefore, be supposed that prince Rājāditya was governing a portion of the Cōla dominions as his father's viceroy.[2] In three records, one belonging to the reign of Rājēndra Cōla I.,[3] the second to Vīrarājēndra I.,[4] and the third to Rājakēsarivarman Kulōttuṅga[5], the modern Tirunāmanallūr is called Rājādittadēvapuram or Rājādittapuram. This may be taken to show that the place was one of the important towns, if not the capital, of the province governed by Rājāditya. If this be true, the circumstances which led to the choice of the capital have to be ascertained. The district in which Tirunāmanallūr was situated is called Tirumuṇaippāḍi-nāḍu both in its inscriptions[6] and in the Tamiḻ *Periyapurāṇam.*[7] The word *muṇaippāḍi* means literally 'war district.' Between the Toṇḍai-nāḍu *i.e.* the Pallava dominions and the Cōla country there was an ancient territorial division called Naḍu-nāḍu *i. e.* 'the middle country' comprising a portion of the South Arcot district.[8] It may be supposed that the possession of this tract of country changed frequently according to the relative strength of the Pallavas and the Cōlas. Naḍu-nāḍu seems to have been subdivided into several principalities such as Tirumuṇaippāḍi, Milāḍu, Vāṇagōppāḍi, Iruṅgōlappāḍi, Ōymānāḍu, Vēśālippāḍi, and others, some of which date from very early times. Perhaps the early Cōlas established them as safeguards against invasion from the Pallavas and other northern tribes. Tirumuṇaippāḍi must have been so called because the wars between the Pallavas and the Cōlas were mostly fought in that district. If this explanation of the name be true, it is but natural that Rājāditya should have been stationed in Tirumuṇaippāḍi. He could keep the chiefs of these principalities in subjection and at the same time prevent any rebellions in the recently acquired Toṇḍai-nāḍu.

Several of the Tirunāmanallūr inscriptions mention natives of Malabar among the servants of prince Rājāditya[9] who was evidently the heir-apparent to the Cōla throne.

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[1] See note 9, below.

[2] It may be doubted if Rājāditya ever actually succeeded to the throne of his father. Of the two authorities for Cōḷa history now available, the large Leyden plates (ll. 39 to 42) report that he survived his father and reigned after him. The Tiruvālaṅgāḍu grant (verse 54) refers simply to his victory over Kṛṣṇarāja and his death, thus implying that he did not reign. The question has, however, to be left open until more conclusive evidence is forthcoming.

[3] *Ep. Ind.*, Vol. VII, p. 138.

[4] *South-Ind. Inscrs.*, Vol. III, p.198.

[5] *Annual Report* on Epigraphy for 1901-2, p. 22, No. 359 of 1902.

[6] *Ep. Ind.*, Vol. VII, p 133.

[7] Edition of 1870, chapter i, p. 19, verses 1 and 2.

[8] According to the *Periyapurāṇam* the following are some to the more important places included in Naḍu-nāḍu:—Tiruvaṇṇāmalai, Tirunāmanallūr, Tirukkōvalūr, Tiruppādirippuliyūr (near Cuddalore), Tiruveṇṇainallūr, Tiruvadi and Vṛddhācalam.

[9] These are:—

(1) Iravi K[ō]dai, a Malaiyāḷāṉ belonging to the retinue (*parivāra*) of Rājādityadēva (No. 331 of 1902).

(2) Iyakkaṉ Rāmaṉ of Malai-nāḍu (No. 346 of 1902).

(3) Tirukkuṉṟappōla Śēndakumaraṉ, a servant (*sēvaka*) who belonged to the Malaiyāla retinue of Rājāditya (No. 343 of 1903).

(4) Vēlakulaśundaraṉ of Kaṇḍiyūr in Malai-nāḍu (No. 341 of 1902).

(5) Kaṇḍaṉ Kāmaṉ of Maṇkarai in [Va]ccanāḍu (*i. e.* the Vatsa country), a subdivision of Neḍumburaiyūr-nāḍu, a Malaiyāḷaṉ belonging to the retinue of prince Rājādityadēva (337 of 1902).

(6) Mānavallavaṉ (*i.e.* Mānavallabha) Kaṇṇaṉ of Īśānamaṅgalam in Neḍuṅgālai-nāḍu, a Malaiyāḷaṉ belonging to the retinue of prince Rājādityadēva (No. 329 of 1902).

Neḍumburaiyūr-nāḍu is also mentioned in the Cochin Jews' grant of Bhāskara-Ravivarman (*Ep. Ind.*, Vol. III, p. 68) and has been identified with Puṟaigiḻā-nāḍu referred to in the Tirunelli plates of the same king (*Ind. Ant.*, Vol. XX, p. 291, footnote 39). The former is the district of Palghaut. It is interesting to note that a Malayāṇa lamp was presented to the Tirunāmanallūr temple in the 33rd year of the reign Parāntaka I. (No. 345 of 1902).

It appears that he had a special regiment of soldiers or a class of servants called "the Malayāḷa retinue." We may suppose that there were also other natives of Malabar on the staff of the prince who do not figure in inscriptions. It is, therefore, not a matter for surprise that the Kērala Vellaṅkumāra was his general. The latter must have been highly favoured by the prince as well as by his father, as he is called the first or chief servant of the Cōlas. This influx of men from Malabar into the Cola country during the reign of Parāntaka I[1]. is natural, because the Udayēndiram plates of Pṛthivīpati II. report that the former married a daughter of the Kērala king.[2] In all probability Rājāditya was born to this Kērala princess. The mother of Rājāditya is called Kōkkiḷāṇaḍigal in one of the Tirunāmanallūr inscriptions.[3] The fact that a pretty large number of men from Malabar were living in Tirunāmanallūr coupled with the building by one of them of a Śiva temple at Grāmam are thus easily explained and support to a certain extent the surmise that Tirunāmanallūr was the capital of the province governed by Rājāditya during the reign of Parāntaka I.

The alphabet of the subjoined record[4] resembles to a certain extent the Tirukkaḷukkuṉṟam inscription of the same king published by me with a photolithograph.[5] The long *ā* is denoted in the word *Peṉṉā* (l. 5) by a straight line starting from the bottom of the second *ṉ* and going upwards.[6] The two central loops of the lingual *ṇ* are not developed. Two forms of dental *n* occur, one with the central loop fully developed (*e. g.* the *ṇ* of *paṇmaṛku* in line 17 f.) and the other without it[7] (*e. g.* twice in *paḍiṇāṇgu* in line 19). The syllable *rai* of *Madirai* (l. 17) is written like *ṉ*, while there is no distinction between the *rai* of *kumbhadārai* in line 24 and the *ṉ* of *mūṉṟ-* in the following line. The akshara *rā* which occurs twice in *Pirāntakadēvar=āṉa* in line 32 is hardly distinguishable from the *na*. In line 26 the syllable *ṟṟu* is written in a group and looks very much like *ya*. The omission of the *sandhi* in *Kaliṅga* (ll. 16 and 18) and in *nūṟāiratti* (l. 19) deserves to be noted.[8]

Text.[9]

1 Svast[i] Śr[ī] [II*] [10] Mauliḥ Puttūra-ja[n]mā kal[i]-
2 bala-jayinām = uttamaḥ Keralānā[m*]
3 [11] Rājādittyasya sākṣād=avicalita-[ca*]-
4 mū-nāyako Mādhurānteḥ [I*] Mauligrām[e*]=
5 dhi-Peṇṇā-taṭa-dharaṇi śilā-mandira[m*]
6 Mandar-ābham Māhādevam mahāśrī [ḥ*] sthi[ra*]-
7 taram=akarod=atra Vellaṁkumāraḥ [II 1*]
8 [12] Nadīsthalī-kṛtaniratel=ś[i]vāspadam

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[1] A native of Cranganore (Koḍuṅgōlūr in Tamiḷ) in Malabar figures as the donor in an inscription at Kuḍumiyāmalai in the Pudukkōṭṭai State (No. 351 of 1904) and another in a record at Tiruccāṉūr near Tirupati in the North Arcot district (No. 260 of 1904).

[2] *South-Ind. Inscrs.*, Vol. II, p. 386, verse 8.

[3] See p. 180 above, note 8.

[4] No. 735 of the Government Epigraphist's collection for 1905.

[5] *Ep. Ind.*, Vol. III, plate facing p. 284, B.

[6] See Professor Hultzsch's remarks in *South-Ind. Inscrs.*, Vol. I, p. 114, and Vol. II, p. 200, note 1.

[7] *Ibid.*, Vol. III, p. 90, and *Ep. Ind.*, Vol. VI, p. 320.

[8] Compare *Ind. Ant.*, Vol. XXII, p. 68 f.

[9] From impressions prepared by myself.

[10] Metre, Sragdharā.

[11] Read *Rājādityasya*.

[12] Metre, *Rucirā*.

9. śilāsthalīm=abhirataye Puradviṣa[ḥ] [I*]
10. nijām=imāṅ=dhiyam=iva supratiṣṭhitām
11. Kumāra ity=akṛta Navāgrahārajaḥ [II 2*]
12. [1] Viśvā-śa[r*]mma-vyāpṛti-cārā[t*] tritayan=[2] tat=
13. bhasmīcakre daityapurāṁ yena nimeṣ[ā*]-
14. [t] [I*] Mārārāti'[r*]=ddhāma Kumāre=dam=ayan=te bo-
15. [3] bhūṣitād= [4] āyuśaṁ=antaḥkaraṇañ=ca [II 3*]
16. Svasti śrī [II*] [5] Kaliūga-vaṣam[6] nālāyirattu-nār[pa]-
17. ttu-nālu Madiraikoṇḍa kō=Pparakēśaripaṇmar-
18. ku yāṇḍu 36 āvadu [5]Kaliū[ga] . . . [ṇra] nāl
19. padiṇāṅgu [7]nūrāirattu eḷu[ba] . . . . . irattu
20. [m]uppattu ēḷu āga Tirumu[ḍiyūr Āṟrut]taḷi-
21. P[eru]māṇaḍigaḷ uḍaiya . . . . m ti-
22. [ru]kkaṟraḷiyāga amai[ppiṭṭu] i[v]v-āṭṭ[ai] Ma-
23. [gara-nā]yaṟru=Ccaṇi-kkiḷamai peṟra [8]Iravadi-n[āṇ]-
24. [ṟu] kumbha-[9]dāraiyāl
25. mūṇṟ-ucci padiṇāṟu
26. aḍiyil Śrī-Āṟrut-
27. taḷi-Pperumāṇaḍiga[ḷ]ai- .
28. tirukkaṟraḷiyiṇ ul
29. [10] ṇaiy puga eḷundaruḷu-
30. vattu[11] pra[di]ṣṭai[12] [śe]yv[i]—
31. ttār Śō[ḷa]rkkaḷ[13] mūla-
32. bhṛtyar śrī-[14] Pi[rā]ntakadēvar=ā[ṇa]
33. śrī-Vīraśōḷa-[P]peru[m]āṇaḍiga[ḷ]
34. [ma]gaṇār Rāj[ā]dittadēvar peru[m]-
35. baḍaināya[ka]r Malai-nāṭṭu Na[n]-
36. dikka[rai]=Ppu[t]tūr Vella[ṅ]-
37. gumaraṇ [II*] Idu paṇ-Mahēśvara[15]
38. [ra*]kṣ[ai] [I*][16]ratshippār śrīpādam ta[lai]
39. mēlaṇa[II*]

TRANSLATION—SANSKṚT PORTION.

Hail! Prosperity! (verse 1) A native of Puttūra, the crown (as it were) of those who overcome the force of the Kali (age) (and) the best of the Kēralas, the highly prosperous Vellaṁkumāra, the veritable general (*camūnāyaka*)[17] invincible (in war) of Rājāditya, son of Madhurānta, built, at this (village of) Mauligrāma in the country on the bank of the (river) Peṇṇā[18], a permanent stone temple (*mandira*) dedicated to (the god) Mahādeva (*i.e.* Śiva), (resembling) in lustre (the mountain) Mandara.

[1] Metre, *Mattamayūra*.
[2] Read *=tad=*
[3] This reading is conjectural though the *ī* of *śī* is quite distinct. The stone is considerably damaged at this spot.
[4] Read *-āyuṣam=*.
[5] Read *Kaliyuga*.
[6] Read *-varṣam*.
[7] Read *nūrāyirattu*.
[8] Read *Irēvadi-*
[9] Read *-dhāraiyāl*.
[10] Read *uḷḷēy*.
[11] Read *eḷundaruḷivittu*.
[12] Read *pratiṣṭhai*.
[13] Read *Śōḷargaḷ*.
[14] Read *Parāntaka°*.
[15] Read *-Māhēśvara-*
[16] Read *rakshi°*.
[17] The word *camūnāyaka* appears to be here used in the sense of *sēnānī* which is one of the names of the god Subrahmanya.
[18] The compound *Pennā-taṭa-dharaṇī* seems to be used in the same sence as the Tamil Peṇṇai-kkarai-nāḍu. The river Pennar is at some distance from the village of Gramam.

(V.2.) Kumāra (*i.e.* Vellaṁkumāra) born at Navāgrahāra thus made this auspicious stone temple well established, like his own intelligence, for the pleasure of the enemy of (the demon) Pura (*i.e.* Śiva) who is fond of localities near rivers.[1]

(V.3.) O Kumāra! May (the god Śiva), the enemy of Māra (Cupid),—who, by the twinkling (of his eye) which is the spy (as it were) engaged in (promoting) the welfare of the universe, reduced to ashes those three cities of the Daityas,—having occupied this shrine (*dhāman*) adorn your life time as well as (your) inner perception!

Tamil Portion.

Hail! Prosperity! (Lines 16 to 20) In the 36th year (of the reign) of king Parakēsarivarman, who took Madirai (corresponding to[2]) the year four thousand and forty-four of the Kaliyuga, (the number of) days [from the commencement of] the Kaliyuga being fourteen-hundred-thousand seven[ty] ....thousand and thirty-seven. (Ll. 20 to 37.) Having constructed as a holy stone temple[3]..................... Aṟṟuttaḷi-Perumāṉaḍigal at Tirumuḍiyūr, Veḷḷaṅgumaraṉ, —the first servant of the Cōḷas, (a native) of Puttūr on the bank of the (river) Nandi in Malai-nāḍu and the great general of Rājādityadēva, (who was) the son of the glorious Parāntakadēva *alias* the glorious Vīrasōḷa-Perumāṉaḍigal,—(cleaned), on the day of Rēvatī corresponding to a Saturday of the month Makara in this year, by pouring (water) out of a pot, (the image of) the blessed Āṟṟuttaḷi-Perumāṉaḍigaḷ (which was) sixteen feet (high) (and had) three crests(?), moved (it) into the holy stone temple, set (it) up (there) and consecrated (it).

This (is placed under) the protection of all Māhēśvaras. The blessed feet of those who protect (this shrine) shall be on (my) head.

V. Venkayya.

[1] *Nadisthali-kṛtanirata* is a Sanskṛt translation of the Tamil *Āṟṟuttaḷi-Perumāṉaḍigaḷ*. The god Śiva is called *nadīpriya* in the Trichinopoly cave inscription of Guṇabhara; *South-Ind. Inscrs.*, Vol. I, page 29. If the word *nadisthali* be equivalent in meaning to the Tamil *āṟṟuttaḷi*, it has to be concluded that the Tamil word *taḷi* 'temple' which, at first sight, appears to be unconnected with Sanskṛt, is only a *tadbhava* of *sthalī* 'place'.

[2] The details of date which we find here we probably owe to the general Veḷḷaṅgumaraṉ. Even to this day it is not uncommon in Malabar to find a date expressed in the number of days expired from the commencement of the Kaliyuga.

[3] This may imply that the temple was not founded by Rājāditya's general, but only rebuilt by him of stone; see p. 180 above.

ARCHÆOLOGICAL REPORTS PUBLISHED UNDER OFFICIAL AUTHORITY.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA*—		
Illustrations of ancient buildings in Kashmir.	H. H. Cole, Lieutenant, R.E., Superintendent, Archæological Survey, North-Western Provinces.	W. H. Allen & Co., 13, Waterloo Place, London, S. W., 1869.
Report in connection with operations in the N.-W. Provinces and the Punjab, etc., for 1869-70.	Lieutenant H. H. Cole .	1870.
Four reports made during the years 1862-63-64-65, Volume I. (C. S.).	A. Cunningham, Director-General, Archæological Survey of India.	Government Central Press, Simla, 1871.
Four reports made during the years 1862-63-64-65, Volume II. (C. S.)	Ditto . .	Ditto.
Report for the year 1871-72, Volume III. (C. S.)	Ditto . .	Superintendent, Government Printing, Calcutta, 1873.
Illustrations of buildings near Muttra and Agra, showing the mixed Hindu-Mahomedan style of Upper India.	H. H. Cole, Lieutenant, R.E., late Superintendent, Archæological Survey, North-Western Provinces.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1873.
"Tree and Serpent Worship" from the sculptures of the Buddhist Topes at Sanchi and Amaravati.	James Fergusson, D.C.L., F.R.S.	Ditto.
Report for the year 1871-72, Delhi and Agra, Volume IV. (C. S.)	J. D. Beglar and A. C. L. Carlleyle, Assistants, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1874.

* NOTE.—The continued series of reports by A. Cunningham (Director-General of the Archæological Survey of India), which extend over the years 1862-1884 inclusive, are marked (C. S.) in this list.

The reports of the New Imperial Series, which began in 1874 and are still in progress, are marked (N. I. S.)

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
Report of the first season's operations in the Belgâm and Kaladgi districts. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1874.
The Antiquities of Orissa, Volume I.	Rájendralála Mitra . .	Wyman & Co., Calcutta, 1875.
Report for the year 1872-73, Volume V. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1875.
Report on the antiquities of Kâṭhiâwâḍ and Kachh. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government, Western India.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1876.
Corpus Inscriptionum Indicarum. Volume I, Inscriptions of Asoka.	A. Cunningham, Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1877.
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Report on the antiquities in the Bidar and Aurangabad districts. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government, Western India.	W. H. Allen & Co., 13, Waterloo Place, London, S.W., 1878.
Report of a tour in Eastern Rajputana in 1871-72; and 1872-73, Volume VI. (C. S.)	A. C. L. Carlleyle, Assistant, Archæological Survey.	Superintendent, Government Printing, Calcutta, 1878.
Report of a tour in Bundelkhand and Malwa, 1871-72; and in the Central Provinces, 1873-74, Volume VII. (C. S.)	J. D. Beglar, Assistant, Archæological Survey.	Ditto.
Report of a tour through the Bengal Provinces of Patna, Gaya, Mongir, and Bhagalpur; The Santal Parganas, Manbhum, Singhbhum, and Birbhum, Bankura, Raniganj, Bardwan and Hughli in 1872-73, Volume VIII. (C. S.)	Ditto . . .	Ditto.
Pali Sanskrit, and old Canarese Inscriptions from the Bombay Presidency and parts of the Madras Presidency and Maisur, arranged and explained.	J. F. Fleet, Bombay Civil Service, and J. Burgess, Archæological Surveyor, Western India.	G. E. Eyre and W. Spottiswoode, London, 1878.
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Report of tours in Bundelkhand and Malwa in 1874-75 and 1876-77, Volume X. (C. S.)	Ditto . . .	Ditto, 1880.
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First Report of the Curator of Ancient Monuments in India for the year 1881-82.	H. H. Cole, Curator of Ancient Monuments in India.	Government Central Branch Press, Simla, 1882.
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Report of a tour in the Punjab in 1878-79, Volume XIV. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Ditto.
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(*a*) Madras Presidency—		
The Seven Pagodas . .	Ditto . . .	Ditto.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
(*a*) Madras Presidency—*contd.*		
Velur	H. H. Cole, Curator of Ancient Monuments in India.	Government Central Branch Press, Simla, 1881 to 1883.
Trichinopoly	Ditto . . .	Ditto.
Srirangam	Ditto . . .	Ditto.
Madura	Ditto . . .	Ditto.
Tanjore	Ditto . . .	Ditto.
Kombakonam . . .	Ditto . . .	Ditto.
Chillambaram . . .	Ditto . . .	Ditto.
Conjeveram	Ditto . . .	Ditto.
Bijanagar	Ditto . . .	Ditto.
(*b*) Bombay Presidency—		
Ahmedabad	Ditto . . .	Ditto.
Poona	Ditto . . .	Ditto.
Karli	Ditto . . .	Ditto.
Ambarnath	Ditto . . .	Ditto.
Elephanta	Ditto . . .	Ditto.
(*c*) Bijapur	Ditto . . .	Ditto.
(*d*) Rajputana—		
Mount Abu	Ditto . . .	Ditto.
Ajmir	Ditto . . .	Ditto.
Jaipur	Ditto . . .	Ditto.
Ulwar	Ditto . . .	Ditto.
(*e*) H. H. the Nizam's Territory—		
Kalburgan . . .	Ditto . . .	Ditto.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
(*f*) Punjab—		
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Second Report of the Curator of Ancient Monuments in India for the year 1882-83.	Ditto . .	Superintendent, Government Printing, Calcutta, 1883.
Report on the Buddhist Cave Temples and their inscriptions. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government for Western and Southern India.	Ballantyne, Hanson & Co., Edinburgh and London, 1883.
Reports of tours in North and South Bihar in 1880-81, Volume XVI. (C. S)	A. Cunningham, Director-General, Archæological Survey of India, and H. B. W. Garrick, Assistant Archæological Survey.	Superintendent, Government Printing, Calcutta, 1883.
Preservation of National Monuments—Fortress Gwalior.	J. B. Keith, Superintending Monumental Preservation.	Ditto.
Catalogue and Hand-book of the Archæological Collections in the Indian Museum, Part I—Asoka and Indo-Scythian Galleries.	J. Anderson, Superintendent, Indian Museum.	Ditto.
Ditto ditto, Part II—Gupta and Inscription Galleries.	Ditto . .	Ditto.
Report of a tour in Gorakpur district in 1875-76 and 1876-77, Volume XVIII. (C. S.)	A. C. L. Carlleyle, 1st Assistant, Archæological Survey.	Ditto.
Report on the Elura cave temples and the other Brahmanical and Jaina caves in Western India. (N. I. S.)	J. Burgess, Archæological Surveyor and Reporter to Government for Western and Southern India.	Ballantyne, Hanson & Co., Edinburgh and London, 1883.
Report of a tour in the Central Provinces and Lower Gangetic Doab in 1881-82, Volume XVII. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Superintendent, Government Printing, Calcutta, 1884.
Lists of Inscriptions and Sketch of the Dynasties of Southern India. (N. I. S.)	R. Sewell, Madras Civil Service.	Government Press, Madras, 1884.

Title of work.	Name and official designation of author.	Press, and date of publication.
INDIA—*contd.*		
Preservation of National Monuments, India.	H. H. Cole, Curator of Ancient Monuments in India.	Plates prepared in Paris, 1884-85.
(*a*) Agra and Gwalior.	Ditto . .	Ditto.
(*b*) Golden temple at Amritsar, Punjab.	Ditto . .	Ditto.
(*c*) Delhi	Ditto . .	Ditto.
(*d*) Græco-Buddhist sculptures from Yusufzai.	Ditto . .	Ditto.
(*e*) Great temple to Siva and his consort at Madura.	Ditto . .	Ditto.
(*f*) Meywar	Ditto . .	Ditto.
(*g*) Buildings of the Punjab .	Ditto . .	Ditto.
(*h*) Great Buddhist Tope at Sanchi.	Ditto . .	Ditto.
(*i*) Tomb of Jahangir at Shahdara near Lahore.	Ditto . .	Ditto.
(*j*) The temples at Trichinopoly	Ditto . .	Ditto.
Third Report of the Curator of Ancient Monuments in India for the year 1883-84.	Ditto . .	Superintendent, Government Printing, Calcutta, 1885.
Report of a tour through Bihar, Central India, Peshawar, and Yusufzai, during 1881-82, Vol. XIX. (C. S.)	H. B. W. Garrick, Assistant, Archæological Survey.	Ditto.
Report of a tour in Eastern Rajputana in 1882-83, Vol. XX. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Ditto.
Reports of a tour in Bundelkhand and Rewa in 1883-84 and of a tour in Rewa, Bundelkhand, Malwa, and Gwalior in 1884-85, Vol XXI. (C. S.)	Ditto . .	Ditto.
Report of tours in Gorakhpur, Saran, and Ghazipur in 1877-78-79 and 80, Vol. XXII. (C. S.)	A. C. L. Carlleyle, 1st Assistant, Archæological Survey.	Ditto.
Report of a tour in the Punjab and Râjpûtâna in 1883-84, Vol. XXIII. (C. S.)	H. B. W. Garrick, Assistant, Archæological Survey.	Ditto, 1887.

Title of work.	Name and official designation of author.	Press, and date of publication.
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Ditto for the year ending 30th June 1900.	Ditto . . .	Ditto, 1900.
Ditto for the year ending 30th June 1901.	Ditto . . .	Ditto, 1901.
Ditto for the year ending 30th June 1902.	Ditto . . .	Ditto, 1902.
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Annual Progress Report of the Archæological Surveyor, Punjab Circle, for the year ending 31st March 1902.	Ditto . .	Ditto, 1902.
Ditto for the year ending 31st March 1903.	Ditto . .	Ditto, 1903.
Annual Progress Report of the Superintendent, Archæological Survey, Punjab and United Provinces Circle, for the year ending 31st March 1904.	Dr. J. Ph. Vogel, Superintendent, Archæological Survey.	Ditto, 1904.
Ditto for the year ending 31st March 1905.	Ditto . .	Economical Press, Lahore, 1905.
Annual Progress Report of the Superintendent of the Archæological Survey, Northern Circle, for the year ending 31st March 1906.	Ditto . .	Ditto, 1906.
Ditto for the year ending 31st March 1907.	Ditto . .	Ditto, 1907.
Ditto for the year ending 31st March 1908.	Ditto . .	Ditto, 1908.
N.-W. F. PROVINCE—		
Report on the explorations of the Buddhist ruins at Jamagarhi during the months of March and April 1873. (Supplement to the Punjab Government Gazette of 12th February 1874.)	Lieut. A. Crompton, R.E. .	1874.
Report on the explorations of the Buddhist ruins near Kharkai during the months of March and April 1874. (Supplement to the Punjab Government Gazette of 11th June 1874.)	Lieut. Skene Grant, R.E. .	1874.
Report on the exploration of the Buddhist ruins at Takht-i-Bai Yusafzai, during the months of January, February, March and April 1871. (Supplement to the Punjab Government Gazette of 6th August 1874.)	Sergeant F. H. Wilcher, R.E.	1874.

Title of work.	Name and official designation of author.	Press, and date of publication.
N.-W. F. PROVINCE—*concld.*		
Report on the explorations at mound Shahji-ka-dheri near Peshawar. (Supplement to the Punjab Government Gazette of 18th November 1875.)	Lieut. C. A. Crompton, R.E.	1875.
Report on the explorations at Taikal near Peshawar. (Supplement to the Punjab Government Gazette of 18th November 1875 and of 30th March 1876.)	Lieut. P. Haslett, R.E. .	1876.
Reports of Buddhist explorations in the Peshawar District by the 10th Company of Sappers and Miners.	Lieut. C. Maxwell, R.E. .	Public Works Department, Punjab, 1882.
Memorandum on excavations at Sikri, Yusafzai.	Capt. H. A. Deane, Assistant Commissioner.	Punjab Government Press, Lahore, 1889.
Detailed report of an Archæological tour with the Buner Field Force.	Dr. M. A. Stein, Ph.D., Principal, Oriental College, Lahore.	Ditto, 1898.
Report of Archæological Survey work in the North-West Frontier Province and Baluchistan for the period from January 2nd, 1904, to March 31st, 1905.	M. A. Stein, Ph.D., Inspector General of Education and Archæological Surveyor, North-West Frontier Province and Baluchistan.	Government Press, North-West Frontier Province, 1905.
Annual report of the Archæological Survey of India, Frontier Circle, for 1906-07.	Dr. D. B. Spooner, Superintendent, Archæological Survey, Frontier Circle.	Ditto, 1907.
Ditto for 1907-08 . .	Ditto . .	Commercial Press, Peshawar, 1908.
BURMA—		
List of objects of antiquarian interest in British Burma.	Dr. E. Forchhammer, Government Archæologist, Burma.	GovernmentPress, Burma, 1880.
Notes on the early History and Geography of British Burma—		
I. The Shwe Dagon Pagoda	Ditto . .	Ditto, 1883.
II. The first Buddhist Mission to Suvarnabhumi.	Ditto . .	Ditto, 1884.
List of objects of Antiquarian and Archæological interest in British Burma.	Ditto . .	Ditto.
Reports on Archæological work done in Burma during the years 1879-89. (Being a Review, dated 18th June 1889.)	Dr. E. Forchhammer . .	1889.

Title of work.	Name and official designation of author.	Press, and date of publication.
BURMA—*contd.*		
The Po U Daung inscription, erected by King Sinbyuyin in 1774 A.D.	Taw Sein Ko, Government Translator, Burma.	Government Press, Burma, 1881.
List of objects of antiquarian interest in Arakan.	Dr. E. Forchhammer, Government Archæologist, Burma.	Ditto.
List of objects of antiquarian interest in Burma.	Ditto . .	Ditto, 1892.
Inscription of Pagan, Pinya, and Ava (deciphered from the ink impressions found among the papers of the late Dr. Forchhammer).	Taw Sein Ko, Government Translator, Burma.	Ditto.
Report on the Antiquities of Arakan.	Dr. E. Forchhammer, Government Archæologist, Burma.	Ditto.
Report on the Kyaukku Temple at Pagan.	Ditto . .	Ditto.
The Kalyani Inscriptions . .	Taw Sein Ko, Government Translator, Burma.	Ditto.
Memorandum of a tour in parts of the Amherst, Shwegyin, and Pegu Districts.	Ditto . .	Ditto.
Note on a tour in Burma in March and April 1892.	F. O. Oertel, Assistant Engineer on special duty, Public Works Department, North-Western Provinces and Oudh.	Ditto, 1893.
Notes on an Archæological tour through Ramannadesa. (The Talaing country of Burma.)	Taw Sein Ko, Government Translator, Burma.	Reprinted from the *Indian Antiquary* by the Educational Society's Steam Press, Bombay, 1893.
A preliminary study of the Po U Daung Inscription of Sinbyuyin, 1774 A.D.	Ditto . .	Ditto.
A preliminary study of the Kalyani Inscriptions.	Ditto .	Ditto.
Notes on antiquities in Ramannadesa. (The Talaing country of Burma.)	Lieutenant-Colonel R. C. Temple, late President, Rangoon Municipality, Burma.	Ditto, 1894.

Title of work.	Name and official designation of author.	Press and date of publication.
BURMA—*contd.*		
Some remarks on the Kalyani Inscriptions.	Taw Sein Ko, Government Translator, Burma.	Reprinted from the *Indian Antiquary* by the Educational Society's Steam Press, Bombay, 18[illegible].
Inscriptions copied from the stones collected by King Bodawpaya and placed near the Arakan Pagoda, Mandalay.	Maung Tun Nyein, Officiating Government Translator, Burma.	Government Press, Burma, 1897.
Inscriptions of Pagan, Pinya and Ava. Translation with notes.	Ditto . .	Ditto, 1899.
Inscriptions collected in Upper Burma.	Taw Sein Ko, Government Archæologist, Burma.	Ditto, 1900—1903.
Index, Inscriptionum B. Birmanicarum. Vol. I.	Ditto . .	Ditto, 1900.
List of objects of antiquarian and archæological interest in Upper Burma.	Ditto . .	Ditto, 1901.
List of Pagodas at Pagan under the custody of Government.	Ditto . .	Ditto.
Report on archæological work in Burma for the year 1901-02.	Ditto . .	Ditto, 1902.
Ditto, for the year 1902-03 .	Ditto . .	Ditto, 1903.
Ditto, for the year 1903-04 .	Ditto . .	Ditto, 1904.
Ditto, for the year 1904-05 .	Ditto . .	Ditto, 1905.
Report of the Superintendent, Archæological Survey, Burma, for the year ending 31st March 1906.	Taw Sein Ko, Superintendent, Archæological Survey.	Ditto, 1906.
Ditto, for the year ending 31st March 1907.	Ditto . .	Ditto, 1907.
Ditto, for the year ending 31st March 1908.	Ditto . .	Ditto, 1908.
MYSORE AND COORG—		
Mysore Inscriptions . . .	L. Rice, Director of Public Instruction.	Mysore Government Press, 1879.
Coorg Inscriptions . .	L. Rice, Secretary to Government.	Ditto, 1886.

Title of work.	Name and official designation of author.	Press, and date of publication.
MYSORE AND COORG—*concld.*		
Inscriptions at Sravana Belgola, a chief sea of the Jains (Mysore).	L. Rice, Director of Archæological Researches and Secretary to Government, Mysore.	Mysore Government Press, 1889.
Epigraphia Carnatica—Inscriptions in the Mysore District, Part I.	Ditto . .	Ditto, 1894.
Ditto, Part II	Ditto . .	Ditto, 1898.
Ditto, Inscriptions in the Kadur District.	L. Rice, Director of Archæological Researches.	Ditto, 1901.
Ditto, Inscriptions in the Hassan District in 2 sections.	Ditto . .	Basel Mission Press, Mangalore, 1902.
Ditto, Inscriptions in the Simoga District, Parts I and II.	Ditto . .	Ditto, 1902.
Ditto, Inscriptions in the Chitaldrug district.	Ditto . .	Ditto, 1903.
Inscriptions at Tumkur . .	Ditto . .	Ditto, 1904.
Inscriptions at Kolar . . .	Ditto . .	Ditto, 1905.
ASSAM—		
Report on the progress of historical research in Assam.	E. A. Gait, I.C.S., Honorary Director of Ethnography in Assam.	Assam Secretariat Printing Office, Shillong, 1897.
List of archæological remains in the Province of Assam.	....	Ditto, 1902.

List of Public Libraries, etc., to which copies of the Director General's Annual Report, Part II, are regularly supplied.

1.—COUNTRIES OUTSIDE INDIA.

UNITED KINGDOM.

British Museum Library, Great Russell Street, Bloomsbury, London.

Bodleian Library, Oxford.

London University Library, Imperial Institute, London, S. W.

Cambridge University Library, Cambridge.

Edinburgh „ „ Edinburgh.

Glasgow „ „ Glasgow.

Aberdeen „ „ Aberdeen.

Trinity College Library, Dublin.

Folklore Society, 11, Old Square Lincoln's Inn, London, W.C.

National Art Library, South Kensington Museum, London

Royal Institute of British Architects, 9, Conduit Street, Hanover Square, London, W.

Advocates' Library, Edinburgh.

The Royal „ Windsor Castle, Berks.

Royal Society, Burlington House, Piccadilly, London.

Royal Society, Edinburgh.

Royal Irish Academy, 19, Dawson Street, Dublin.

National Library of Ireland, Leinster House, Kildare Street, Dublin.

Royal Asiatic Society, 22, Albermarle Street, London.

Society of Antiquaries of London, Burlington House, Piccadilly, W.

Royal Scottish Museum, Edinburgh, Scotland.

Society of Antiquaries of Scotland, National Museum of Antiquities, Queen Street, Edinburgh.

Imperial Institute, London.

Indian Institute, Oxford.

Society for Protection of Ancient Buildings, 10, Buckingham Street, Adelphi, W.C.

The Royal Academy of Arts, Burlington House, London.

Society for the promotion of Hellenic Studies, London.

Royal Anthropological Institute of Great Britain and Ireland, 3, Hanover Street, W. London.

FRANCE.

Bibliothèque Nationale, Paris.

Institute de France, Paris.

Musée Guimet, 7, Place d'Iena, Paris.

1.—COUNTRIES OUTSIDE INDIA—*contd.*

GERMANY.

Bibliothek der Deutschen Morgenländischen Gesellschaft, Halle (Saale), Germany.

Royal Prussian Academy of Sciences, Berlin.

Royal Museum for Ethnology, Berlin.

Königliche Gesell Schaft der Wissenschaftēn zo Göttingen, Göttingen.

Kgl. Preussische Akademie der Wissenschaften W. 35. Pots damerstrasse 120. Berlin.

AUSTRIA.

Imperial Academy of Sciences, Vienna.

Hungarian Academy, Buda-Pesth.

ITALY.

Biblioteca Nazionale, Rome.

R. Biblioteca Nazionale Centrale di Firenze.

The Società Asiatica Italiana, Firenze.

British School at Rome.

American School of Classical Studies at Rome.

OTHER COUNTRIES IN EUROPE.

Koninklijke Akademie van Wetenschappen te Amsterdam, Holland.

Royal Institute of Netherlands, India, The Hague, Holland.

Imperial Academy of Sciences (for the Asiatic Museum), St. Petersburg, Russia.

Royal Library, Copenhagen, Denmark.

National Museum, Copenhagen, Denmark.

Académie Royale d'Archéologie de Belgique, Anvers.

University Library, Upsala, Sweden.

" " Christiania, Norway.

British School at Athens, Greece.

La Société Archéologique d'Athènes, Athens, Greece.

AMERICA.

American Oriental Society, 235, Bishop Street, New Haven, Conn, U.S.A

Smithsonian Institution, Washington, D. C., U. S. A.

Secretary, National Museum, Washington, U. S. A.

Field Museum of Natural History, Chicago.

BRITISH COLONIES.

The Museum, Canterbury, New Zealand.

Literary and Historical Society, Quebec, Canada.

Melbourne Library, Melbourne.

University Library, Sydney, New South Wales.

Victoria Public Library, Perth, Western Australia.

Royal Asiatic Society, Ceylon Branch, Colombo.

Straits Branch, Royal Asiatic Society, Singapore.

North China Branch of the Royal Asiatic Society, Shanghai.

Museum of Arabic Art, Cairo, Egypt.

I.—COUNTRIES OUTSIDE INDIA—*concld.*

Foreign Colonies.

Directeur del'Ecole française d'extrême Orient, Hanoi.

Bataviaasch Genootschap van Kunsten en Wetenschappen, Batavia.

Institut Françaisd' Archéologie Orientale du Caire, Cairo, Egypt.

Ethnological Survey for the Philippine Islands, Department of Interior, Manila.

II.—INDIA.

(1) Imperial.

Imperial Library, Calcutta.

Indian Museum, Calcutta.

Press Room, Calcutta and Simla.

(2) Provincial.

Madras.

Secretariat Library, Fort St. George.

University „ Madras.

Public „ „

Presidency College „

School of Art, „

Government Central Museum, Madras

Christian College Library „

Bombay.

Secretariat Library, Bombay.

University „ „

Bombay Branch of the Royal Asiatic Society, Town Hall, Bombay.

School of Art, Bombay.

The College of Science, Poona.

Bengal.

Secretariat Library, Writers' Buildings, Calcutta.

University Library, the Senate House, Calcutta.

Presidency College Library, 1, College Square, Calcutta.

Sanskrit College Library, 1, College Square, Calcutta.

Asiatic Society of Bengal, 57, Park Street, Calcutta.

United Provinces.

Secretariat Library, P. W. D., Allahabad.

University „ Allahabad.

Public Library, Allahabad.

Provincial Museum Library, Lucknow.

Sanskrit College, Benares.

Thomason College, Roorkee.

II.—INDIA—*concld.*

PUNJAB.

Secretariat Library, Public Works Department, Lahore.
Punjab Public Library, Lahore.
Museum Library, Lahore.
University Library, Lahore.
Government College Library, Lahore.
Delhi Museum and Institute, Delhi.

NORTH-WEST FRONTIER PROVINCE.

Secretariat Library, Peshawar.
Museum Library, Peshawar.

BURMA.

Secretariat Library, Rangoon.
The Bernard Free Library, Rangoon.
The Phayre Museum, Rangoon.

CENTRAL PROVINCES.

Secretariat Library, Nagpur.
Museum Library, Nagpur.

ASSAM.

Secretariat Library, Shillong.

COORG

The Chief Commissioner of Coorg's Library, Bangalore.

NATIVE STATES.

Hyderabad.

The Resident's Library, Hyderabad.

Central India.

Library of the Agent to the Governor-General, Indore.
The Librarian, Dhar Museum Library, Dhar.
Rajkumar College, Indore.

Rajputana.

Library of the Chief Commissioner and Agent to the Governor-General, Ajmer.
College Library, Ajmer.

Baroda.

Library of the Resident at Baroda.